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THE WARNING OF THE ENGLISH STRIKES.

BY HENRY GEORGE.

How it may come that the New Zealander shall yet sit and meditate on the broken arch of London Bridge, the strike of the London dock laborers gives something like a suggestion.

War is the great destroyer. Of all wars, civil war is most destructive. Of all civil wars, that which rages, not between different sections of the same country, but between different classes in the same territory. And most destructive of all civil wars of this kind is that waged in great cities.

Such strikes as that in London are in reality incipient civil war of this kind. Passions that make man the most destructive of animals are aroused. They find expression, it is true, only in passive, not in active form—in refraining rather than in doing. But it is like superheated water, which, so long as confined, retains its liquid form. Once let the pressure be relieved, and with explosive force it flashes into steam.

Consider the spectacle that the banks of the lower Thames have presented for some weeks past. The wheels of industry blocked, commerce paralyzed, perishable cargoes rotting, ships unable to go to sea, trade driven away, enormous losses going on, ordered armies of tens and scores of thousands parading, great

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bodies of men fed by public rations—for the time it could hardly have been worse if the Channel fleet had been annihilated and Continental squadrons blocked the river's mouth.

Yet law and order have reigned throughout. The forces that keep the peace are strong in London. The police are numerous, of splendid physique, and well disciplined, and large bodies of the flower of the regular army are constantly in reserve. And the leaders of the strikers have used their influence to prevent violence. But what has been going on in London is nevertheless war—a contest in which both parties have been trying to inflict loss and injury on each other, counting for success on doing so. Only passive war, it is true; a contest of endurance, not of physical force. But the war spirit was there—the sense of injury and feeling of animosity; the passion that leads to the taking of life and destruction of property. And the danger was there. It needs but an accident to convert passive into active energy. Burns said two weeks ago that his influence alone had prevented the firing of London in several places.

Greatest of great cities, the world's metropolis, Babylon of Babylons, yet steadily growing with accelerated rapidity, London is to-day what New York and Chicago and St. Louis and San Francisco promise to become; the type towards which all great cities tend. It is in London of all places on earth that one may see and feel the strength and weakness of modern civilization, its glory and its shame, the high possibilities it is opening, and the explosive forces it is generating. There is London and London, it is true—the London of society, of science, of politics, of religion, of philanthrophy, of business, of amusement. And he who has password and key may see one London and be hardly conscious of the existence of any other. But there is also the London of hard strain and bitter pinching, of want and misery, of vice and degradation.

And if one strives to realize what the whole great city is and what it holds, the streets of London are the place where it may most clearly be seen that the tendencies of modern civilization are towards catastrophe; and that, as Macauley saw, the Huns and Vandals that may be yet to come, will come not from without, but from within.

A few weeks ago I stood in New Bond Street before a painting in a dealer's window. It was by a noted painter, Moscheles, but

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of an every-day scene. Not only an every-day scene in London, but in New York and other great cities. In the background fine shops, with the passers and loiterers one sees in fashionable retail streets; at the curb a private carriage, the liveried coachman erect on his box and a fur-caped footman springing to open the door for a richly-dressed lady coming out of a jeweller's establishment. In the foreground, three sandwich-men tramping along.

I noted for a few minutes those who stopped. They glanced at this picture a moment, and then, as though it were too familiar for attention, turned to picture of mountain or seacoast, of fruits or flowers, or the graceful female form. A man with high-lettered hat and long oilcloth coat all printed over glanced in a moment from his handing out of circulars. I asked him what the picture was. It was a picture advertising a theatre, he said.

It was more. Into this picture of familiar things the painter, with the subtle power that is in his art, had put the problem of modern civilization. Underneath it, a piece of cardboard bore the legend, "In the year of our Lord, 1889!"

Almost twenty centuries; and in the greatest and richest of Christian cities, whence missionaries are sent to Asia, to Africa, to the islands of the sea, human labor is cheapest of commodities, and man, "the roof and crown of things," is turned into a sign-post! It is this paradox and problem that this London strike brings out.

This strike of dock laborers is, in many respects, the most remarkable of the industrial conflicts which in recent years have been so many; remarkable because of the class of men embraced, the endurance manifested, and the sympathy excited, and for the growing ideas and new influences it discloses.

The London dock laborers consist of a small class who have something like steady employment, and a larger class of casuals who are taken on by the hour as needed. The work being unskilled labor, the London docks have been the last chance of unemployed men physically able to do such work. It is at their gates that the pressure for employment has most strikingly shown itself. Around them have gathered every morning thousands of men—men with hungry wives and children, men who had walked the streets all night, or got what rest they could in alley-ways, beneath railway arches, in doorways, or behind boxes—waiting the appearance of the contractors or dock foremen to pick out

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those to be set to work, and then pressing, scrambling, fighting for the chance like hungry dogs for a bone. Journals like the *Pall Mall Gazette* have made their readers familiar with these scenes, not merely by pen-pictures of onlookers, but by accounts from men who have gone amid the crowds and struggled for work; and sympathy has been excited which has shown itself substantially during this strike.

But for this deep and wide sympathy the dock laborers would have been unable to maintain a strike for more than a few days, if even beyond a single day. Besides the contributions that have flowed in through newspapers and directly to the committees, every parade and public meeting has been made a means of collecting money from the crowds, some £400, mostly in pennies, having been taken in at the Hyde Park demonstration; and the streets in the East End have been scoured by strikers' collectors, who accosted every passer and boarded every omnibus. Besides the contributions of money—in which far-off Australia bore the palm—the shopkeepers in the vicinity of the docks made liberal donations in kind, even the pawnbrokers having reduced or waived interest on articles pawned by strikers or their wives. The Salvation Army soup-houses reduced their prices to strikers and their families one-half at the first, and afterward, I believe, dealt out food on ticket without charge.

All the charitable and religious societies working in the east of London seem, in the same spirit, to have done what they could to assist and support the strikers. Pressure has been brought to bear on the dock directors by city business men to induce them to yield, while the religious elements working to the same end included such extremes as General Booth, of the Salvation Army, the skirmishers, so to speak, of the low wing of the Established Church, and the Bishop of London, its official local head; Albert Spicer, the leading Congregational layman; and Cardinal Manning, the foremost representative of English Catholicism.

Perhaps even more striking than all this—at least even more ominous to "things as they are"—is the fact that the policemen detailed to march with the first procession of strikers subscribed among themselves to pay for a band, and that the guards in their barracks at Birdcage Walk cheered the Hyde Park procession as it passed. It was when the French guards sided with the mob that the Bastile fell. And when the day comes that policemen refuse to

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club and soldiers to shoot men to whom they are bound not merely by human but by class sympathy, the guarantees of the existing order, on which all over Europe the House of Have so confidently leans, are gone.

It would be a mistake to suppose that all this sympathy which has enabled penniless, unskilled men to hold out for a month is merely sympathy with poverty and suffering, such as might go out to victims of flood or fire. It is something more. It has in it the feeling—ranging from uneasy suspicion to passionate conviction—that the dock laborers are victims of social injustice. It has in it, in large degree, a desire to do more than to help the dock laborers—the desire to raise the spirit and promote social discontent among the most downtrodden of the English people. And it is as an evidence of the growth of such discontent that this strike is most significant. It is in this respect far more significant than any of the strikes of the skilled trades.

An English politician of the first rank, then a cabinet minister, said to me some years ago: "In spite of its shocking contrasts, the existing order of things is secure in England. Go to the entrance of the park of an afternoon in the season. There you will see in long procession the utmost extravagance of luxury, the very ostentation of wealth. Look at the faces of the poorer people crowded together to watch the show. You will not find in them the expression of envy or hatred, the consciousness that their robbery provides this luxury, but of pure admiration. This is really the feeling of one extreme towards the other. The poor admire the rich. The man who cannot find work does not feel bitterly towards the great landlord or capitalist, but towards the man whose competition he thinks is depriving him of employment. The man who has three shillings a day envies only the man who has three and sixpence. And so through all gradations of society, each class is more than content to see others above it, because of the conscious superiority with which it looks down on those beneath it."

This is, indeed, the strength of the existing order. But this keen observer made, I think, the same mistake as one who, from the temper of the crowds that watched the carriages rolling from Paris to Versailles something over a century ago, had argued the permanence of the ancient régime. And though he is doubtless

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now of the same opinion as when he thus spoke, yet during the seven years that have passed strong influences have been at work beneath the surface of British politics and society. On the one hand, a recognition of the fundamental injustice which denies to the great body of the British people their natural, equal, and unalienable right to the use of British soil, and makes the element on which and from which all must live the private property of some, has spread widely and deeply. On the other hand, socialism has been making way. The two things are widely different and in some respects antagonistic, but both foster social discontent.

And beneath all this is the effect of compulsory education, of the extension of the franchise, of cheap newspapers and cheap books, of the efforts that have been making to improve the intelligence, the morality, the physical well-being of the poor—from the teetotal movement, the Salvation Army, and the People's Palace, to the flower missions and the taking of children from the slums for a month, a week, or a day in the country, there giving them glimpses that forever after make them dissatisfied with what before seemed natural because it was all they knew.

None of these agencies have yet completed their work ; they are only beginning it. The board schools have not yet been in operation for twenty years. The only really radical half-penny paper is but two years old. The system of registration which disfranchises great bodies of workingmen, and the property suffrage which gives to richer men two, four, and six votes apiece, still prevents democratic strength from fairly showing itself. And the generation is not yet fairly on the stage in which other ameliorative influences will tell.

But the steady, ofttimes cruel, work of school boards and truant officers in driving even hungry children to school is beginning to show in the decadence of local dialects and the disappearance of illiteracy. The *Star* has a circulation of over two hundred thousand. John Burns, the leader of this strike, is a member of the County Council, on which peers of the realm are glad to sit, while candidates for office find it to their interest to show sympathy and send money to the strikers.

Let it be granted, as some contend, with an air of thus settling all social problems, that the condition of the masses is, on the whole, growing better. Man is not an ox for whom any standard of contentment can be fixed ; who, given so much food

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and drink, will fill his stomach and chew the cud. His desires grow by what they feed on; are aroused by glimpses of new gratifications. According to De Tocqueville, it is when things are growing better, not when they are growing worse, that revolutions come. This at least is certain: that hope is an essential element in the social discontent that shatters institutions. American slaveholders were right when, in the interests of the "peculiar institution," they made it a crime to teach a slave to read, and sought as far as possible to prevent his seeing or hearing of a free black.

Each year as it passes is making English thought and English conscience more restive under existing social conditions; is making more certain either peaceful readjustment or blind and forcible revolt. Between these two every one of any influence must take his choice. If he will not aid the one, he is helping on the other.

As I write, pulsing flashes in the cable mirror have told the western world that the strike is ended and London breathes free again. After a month's strife the Cardinal whom men know only to reverence and love, and whose strength in meekness has been abated neither by years nor by Rome's purple, has effected a compromise.

Think of it. So has our civilization soared that what happened in London when the sun was sinking is told in New York ere the shadows have more than begun to lengthen. Think of what advances in the arts of production this suggests. Then think of what this London strike so forcibly brings out—that in the distribution of wealth we are in reality no further advanced than when barbarian fought barbarian.

We girdle the earth; we weigh the stars; we rule scales to the hundred-thousandth of an inch; we make instruments so delicate that they record and give back again the finest inflections of human speech. Yet when it comes to dividing the product of their joint exertion between labor and capital, we have nothing better than

> "The good old plan,
> That they should get who have the power, and they should keep who can."

The London strike is over. There was war. There is a truce. And with the next quarrel war will begin again.

The lesson of this London strike! What is it but the lesson of the strikes and lock-outs in the Illinois coal-fields; of the New York freight-handlers' strike; of the Chicago strike, out of which

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grew the explosion of the Haymarket bomb and the hanging of the Anarchists; of the southwestern railroad strike; of the Pittsburg riots—the lesson of all strikes, coming sharper and clearer as the years go on? It is the lesson that the social problem cannot be ignored; that unless the moral advance of our civilization is commensurate with its intellectual and material advances, civilization itself is doomed. A civilization in which the arts of production advance by leaps and bounds, and distribution is left to war, though but passive war, is like an Eiffel Tower standing on one leg. The higher we carry it the more certain the final crash. That is what we are doing here in the United States, as there in great Britain. And every year it becomes more dangerous.

For every year society becomes integrated, industry more complex and interdependent, and the stoppage of one function more likely to involve and paralyze others. You may cut a worm in two, and both pieces will live. But a bodkin's touch in a vital place, and your man is dead.

The loss caused by the London strike is estimated at from two to three million pounds. Had it continued in its highest intensity during the whole time, the loss would have been much greater. Had the stevedores and the wharfmen and the coal-handlers stayed out as long as the dock laborers, every factory in London and its neighborhood might have been closed. As it was, coal rose to forty-five shillings a ton, mail steamers were delayed for days, excursion steamers with full passenger lists had to give up engagements, while colliers, turning back, literally carried coals to Newcastle. The gas stokers refused to come out when asked, for they had just won a concession on a threatened strike of their own, and sent a donation instead. Supposing they had not won the concession, and had come out, and left London in darkness but for a night—London, where no man knows his neighbor; London, with its army of thieves and vagrants; its public houses certain in such case to be sacked, and their spigots set flowing ere the peal of twelve! The manifesto of the strike leaders calling on all workmen to stop work fell flat. But supposing it had been followed in only a few of the more vital occupations, as at a time when the strike spirit was more rife it might have been, what would have been the loss? and the danger?

As it is, the strike has cost from ten to fifteen millions of our money, to speak of no more than money cost. What has it set-

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tled? There is a gain in some ways, but nothing is settled. The dock companies will hesitate before refusing the next demand that involves a strike, and other employers will be warned by their loss. But on the other hand, the substantial success of this strike will prompt to others. The question of division between employer and employed is still left to force; the labor question, the question of questions for our civilization, is untouched.

See precisely what has been the gain. Fresh spirit has been infused into a downtrodden body of workers, and the social question again forced on public attention for the warning of those who have eyes to see and ears to hear; the Socialists have made a gain, and their propaganda will go on with more ardor and zeal than ever; and a considerable body of the strikers will, for a while at least, have better wages and more permanent work. But the dock companies will employ fewer casuals. So far from any vent being opened for the mass of unskilled unemployed labor constantly congregating in London, such poor vent as the docks afforded will be narrowed, perhaps closed, for some of the dock companies do not employ casuals.

This is the hopelessness of trades-unions and strikes, so far as any settlement of the labor question is concerned. It is like leveeing a river subject to flood. Every levee that is raised requires constant watching, and every new levee increases the pressure on all. Nay, the illustration is hardly strong enough. For the rise of the water also increases the swiftness of the current that carries it off. But the restrictions with which trades-unions keep each their own little territory from inundation by unemployed labor do not add to the facility with which that labor finds employment.

Am I, then, opposed to strikes? My answer would be, No! A strike is the necessary weapon of the trades-union, and without it the trades-union would be of as little effect as a prohibitory act without a penal clause. I believe, as I have never neglected an opportunity of telling workingmen, that trades-unions can accomplish nothing large and permanent, and that the method of raising wages by strikes is the method of main strength and stupidity. But I also believe that trades-unions and strikes, and especially among such a class as the London dock laborers, may so raise the spirit of men, so, temporarily at least, improve their condition, as to enable them to act in a more promising line. There is

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no hope from the very poor. They are as dangerous as the very rich.

The organization of the dock laborers in Glasgow and Belfast,* which preceded the London strike and won considerable concessions, was initiated by Scottish single-tax men, and the money which enabled the Glasgow strikers to hold out until they brought the employers to terms was advanced by an English single-tax man. These men look on labor organizations and their necessary weapon, the strike, merely as a means for infusing heart and hope into a downtrodden class, and so improving their condition that they may be able to see in the monoply of the natural element of all production the real cause of the unnatural competition in the labor market, and in the restoration of equal rights in the soil, the simple remedy to be applied through the ballot. The London organization and strike seems to have been initiated and managed by Socialists, though supported by all who have sympathy with the condition of the laborer, and brought to a final close by the offices of Cardinal Manning.

Nor do the thorough-going Socialists hope by mere trades-unionism and sporadic strikes to accomplish more than preparatory work. In fact, they are opposed to trades-unionism as it has developed in Great Britain and in the United States, as forming an aristocracy of labor, which prevents the union they deem essential. What they are bent on is such a general and universal organization of labor as will enable labor to appropriate all the tools and means of production, to control all industry, abolish competion, and do away with the wage system by putting every one on the pay-roll. It must have been a glad Saturday afternoon to them when the manifesto calling for a general strike in London was issued. The hope proved delusive, but for a few hours at least they must have thought that the time long waited for had come.

Now that I have answered the question, some readers would like to ask, Let me put one. I would like to ask the intelligent,

* One of them being a system of pay ticket, cashable in certain public houses, at the price of taking a drink. I have been struck in England and Scotland by the number of ardent teetotalers who are working for social reform, Burns, by the bye, being a strict temperance man. The temperance people who imagine that could drinking be abolished poverty would cease, in large degree mistake cause for effect; but that every advance in temperate habits among the working classes does increase both the disposition and the power to overthrow the conditions that produce poverty is clear.

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well-to-do people, of whom the readers of THE NORTH AMERICAN REVIEW on both sides of the Atlantic are so largely composed—the professors, clergymen, doctors, and lawyers, the bankers, merchants, manufacturers, and capitalists—whether they are in favor of strikes. I do this because on both sides of the Atlantic the influence of this class is, in the main, passively or actively exerted in favor of strikes.

I know that there is a good deal of gush about profit-sharing as preventing strikes, or arbitration as taking their place, talked by, or rather to, this class,—for they, and not workingmen, are its consumers. But this amounts to nothing, unless it be to the admission that organization among workingmen, with some method of enforcing their "reasonable" demands, is, in the nature of things, necessary. The profit-sharers assume that all employers have profits, and that wages called by another name would cease to be wages. The believers in arbitration assume that men who have the power of enforcing their demands will consent to submit them to arbitration, or they vaguely contemplate some kind of courts which will have power to compel employers to pay wages they do not wish to pay and workingmen to work when and where they do not want to. This is the only sort of arbitration that would prevent strikes, for all human law rests ultimately on force, and though a league of nations might put an end to international war, it could only be on the condition that the power of the league should be turned against the nation that refused to obey the mandate of its tribunal. The profit-sharers and the arbitrationists ought to go to the Socialists, where they belong, for the State Socialists, with their organization of all industry and fixing of all prices, are the thorough-going profit-sharers and arbitrationists. Indeed, they are there already, for they are, in fact, but rose-water Socialists.

There are also those who condemn strikes with the confidence and vigor of men who, from premises in which essential facts are suppressed, argue, by logical methods, to false conclusions. They say that it is the right of every employer to employ, and of every workman to work for, whom he pleases and on what terms he pleases, and that while workmen have an unquestioned right to stop work individually, they have no right to combine to force others to stop. These men have shut eyes for boycotting by employers, but are alive to the wickedness of boycotting by workmen.

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Against combinations of capitalists to freeze out business rivals, to blackmail and rob under forms of law, they have little or nothing to say, but are bold as lions in inveighing against the violation of personal liberty by labor combinations. Though there is an implied falsehood in their premises, the vigor with which they push to their conclusions is better than the weak tea of the shilly-shally school. But their day both in Great Britain and in the United States is gone, and what influence they may exert on workingmen is the opposite of what they wish.

But the position of the main body of the class I speak of, as shown in press, pulpit, and university teaching, has, in certain fashion, advanced beyond that of the ultras who would put down strikes and substitute nothing. Generally it regards strikes as all right if not carried too far, or, at least, as a necessary evil. Not merely is the influence of this most influential class mainly exerted to prevent the spread of ideas that aim at something better, but it acquiesces in and fosters ideas that look to restriction, regulation, and interference as the only way of doing anything for workingmen.

I have not space to point out how in England the real strength of socialism comes from the upper rather than from the lower classes, but in some respects this is obvious. A committee of peers, the chairman being Lord Dunraven, has been for some time taking testimony in regard to the sweating system. The character of the measures they will propose is clear in advance. To cure evils caused by restriction they will propose more restrictions; the enforcement by law of such prohibitions and regulations as trades-unions try to enforce by combinations and strikes. Michael Davitt raised in Ireland the cry of the land for the people. How have the ruling class striven to head off the agitation thus begun? By gross interferences with what they declare to be the rights of property, by stepping in between man and man and fixing prices. And that not sufficing, by furnishing one particular class with capital to buy farms at the cost and risk of the whole body of taxpayers. What is the difference in principle between supplying Irish tenants with money to buy farms and supplying English operatives with money to buy factories, or London costermongers with money to buy donkeys? And since the purse of government is only the purse of taxpayers, since governments produce nothing, but can merely give with one

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hand what they take with the other, what is the difference, save as a matter of adjustment, between furnishing money to buy these things and the simpler plan of taking them from one set of men and handing them over to another? The difference between thorough-going State Socialists like Mr. Hyndman and the majority of Parliament is not of direction, but of degree. And in this country the same tendency may be seen. What is our protectionism but a form of socialism?

The great loss of the London strike falls on non-combatants. This is the case with all such strikes, and increasingly. And designedly. Just as towns are bombarded to make garrisons capitulate, so it is the true policy of strikers to make the general public feel injuriously their opponents' obstinacy.

As to strikes being all right so long as they do not involve force, why, all strikes in occupations which unemployed labor can enter must involve force of some kind. This London strike—thanks largely to Mr. Burns, who is really a superior man, and of whom I remember saying to my companion when, some five years ago, I first met him, that if he lived he would be heard of, and thanks to such men as Cardinal Manning, to say nothing of the police—has been, by all accouuts, a most decorous and well-bred strike. Nevertheless there was something that kept men who would have been glad to take the places of the strikers from applying for work, and I read in a London paper of a train of meat wagons, which the strikers' pickets mistakenly thought had come from the docks, being compelled to turn back. Did the drivers turn back merely because they feared the pickets would feel bad if they passed on?

Are strikes necessary? Under present conditions in which the opportunity of employment is a privilege, in which men talk and think of those who "furnish work" as benefactors, they are inevitable, and must increase in magnitude and intensity. When wealth is concentrating in great blocks, when capital is combining in all directions, the growing intelligence and increasing aspirations of the laboring masses will not permit them to be crowded to the wall without struggling. Under these conditions strikes can only be prevented by laws which will destroy liberty and put aside the rights of property. But is there no alternative?

What is the real justification of the strike, both in the minds of the men who engage in it and in the minds of those who support

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it? Is it not that the men who thus try to force their employers have no power to employ themselves?

What more obvious, stated nakedly, than that, while all men have a right to work or not to work as they see fit, no one has a right to prevent any one else from working, and that no one has a right in any way to force another to employ him or to compel him to assent to the terms of such employment. Yet declare this, as applicable under present conditions to mere laborers in London or New York, and you but mock them. For to say nothing of the minor restrictions and taxations which prevent men from working, our treatment of the natural basis of all work is one which prevents men from working.

Go up in imagination, as it were in a balloon, above London or New York, or any city in which unemployed men are struggling for work, or preventing others from working in order to compel some poor little advance in wages. Look down, as it were, from a height.

What is man, the animal who builds cities, and excavates docks, and lays wires under the ocean, and drives ships over it? Is he not a land animal, whose very body is composed of land? What is his production but the bringing-forth on land of materials drawn from land, by moving, combining, separating them so as to satisfy his desires? Look, and in every direction see land half used or not used at all. Why should there be any scarcity of work; why should men willing to work suffer and strain for want of the things that work produces, while land, the natural source and means of all production, is so abundant? There is no reason in the nature of things. The reason is simply that the natural element on which all men must live and work, if they are to live and work at all, is by human law made the exclusive property of some men, who thus can and do prevent other men from working, and rob them of the produce of their work.

Here is the root of the social problem, of all the paradoxes of our modern civilization.

The lesson of the London strike—it seems to me to be that modern society has but the choice between the single tax and socialism, between justice and war.

HENRY GEORGE.

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PROGRESS AND THE POST.

BY THE HON. DON M. DICKINSON, EX-POSTMASTER-GENERAL OF THE UNITED STATES.

THE household, the farm, the shop, the office, the counting-house, the factory, and the mine, and all political, social, and economic relations of our people, have come to be so dependent upon certain, free, and quick communication that they must speedily demand of Congress two radical reforms in postal administration : the one, through a readjustment, if not a recreation, of the fundamental law of the post-office establishment, to suit the entire change in conditions since its organization, and to train into its proper orbit this enormous and unwieldly eccentric among American institutions ; the other, a revision of the patchwork of exigent legislation on the subject of carrying the mails, and a fuller exercise of the constitutional power of Congress, too long neglected, over the whole matter of the transportation and transmission of intelligence.

The postal service has long since outgrown the organic law of the establishment.

The scheme of a department as adopted by the fathers substantially followed the colonial plan as practised by Franklin, who, in the language of the act of Parliament creating the office of Postmaster-General for the colonies, which he held, was "to keep his chief letter office in New York, and other chief offices at some convenient place or places in other of Her Majesty's provinces and colonies in America." As late as 1836, when the business of the whole service in the United States had not reached, in gross receipts, a volume equal to that of the average wholesale New York merchant of to-day, the Congress considered the Postmaster-General as the chief postmaster in all the post-offices, and the officers corresponding to those now called postmasters as his "deputies."

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At the time of the adoption of the Constitution the gross business did not equal forty thousand dollars, and when the department was organized the total expenditures were less than ninety thousand dollars per annum. The tradition is not beyond belief, therefore, that Benjamin Franklin in 1753, if not in 1775,* carried the entire general archives of this executive office in his hat or his breast-pocket; nor is it to be wondered at, considering the then conditions, the concentrated population, the small business, and the primitive methods of communication, that the founders of the government should have adopted the theory that the whole concern, in general and in detail, might be efficiently conducted by one man with a force of clerks. This is still the fundamental plan of the system, and it has become as unfitting as the swaddling-clothes of a babe to the form of a giant. Its misapplication to a growing service became apparent as early in 1814, when the House of Representatives appointed a committee "to inquire into the expediency of revising the laws regulating the general post-office establishment of the United States, and so amending them as to render them more conformable than they are at present to the principles of the Constitution."

At that time the gross revenue of the department had reached the sum of but seven hundred and thirty thousand dollars annually; there were two thousand six hundred and seventy-four post-offices, and forty-one thousand seven hundred and thirty-six miles of post routes. In view of the present conditions, when our leading offices in cities each transact from double to five times the entire postal business of the nation of that period; when there are sixty thousand postmasters, and one hundred and seventy thousand persons engaged in the service, and its cost is upwards of sixty-six millions; and in view of the fact that the law as then complained of still remains practically unchanged, the emphasis and vigor with which these figures are used to support the resolution make the debate upon it now read like a page from Gulliver.

The mover of the resolution declared that it was an alarming feature that during four several Presidential terms of office the number of the Postmaster-General's subalterns "have reached three thousand persons, who, under another head of this depart-

* Chosen Postmaster-General by the Continental Congress in 1775.

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ment, and another order of things, might be planted as the worst emissaries for the worst purposes over the United States of America"; and that, if he did not abuse his place with this great power, it was a proof that the then Postmaster-General was a purer man than the speaker "ever knew or heard or read of." He pointed to the concentration of power in this one man as a great and dangerous evil, from which he apprehended that the time would come "when honorable Senators or other elevated men might be diverted, perverted possibly, from their duties by hopes allowed to be entertained that a postmaster may be prevailed on to translate them from their public places to others of less dignity, but more emolument," and that "unless some remedy be applied, and that without delay, we are in danger of a new order of Jesuits in this country, with an unlimited general at their head to dictate his orders, and enforce them under all the pains and penalties of removal from their deputations." He closed the debate with the demand that "the post-office establishment be put on the footing of all other departments of the general government." And in this he voiced a sentiment which the absolute need of the service, as well as the principles of a free government, must force upon the attention of a modern Congress. Eighteen years later, on the floor of the House, Edward Everett called marked attention "to the vast and expensive establishment the post-office has become," and presented what was evidently a startling array of figures of the cost of the service in these words :

"The expense at which it is supported for the year ending July, 1832, amounted to the large sum of two million two hundred and sixty-six thousand one hundred dollars, of which two million two hundred and fifty-eight thousand five hundred and seventy dollars were actually levied in the form of postage within the last year. The entire expense of the navy of the United States is but three million three hundred and seventy-nine thousand dollars, and that of the whole civil list, foreign intercourse, and miscellaneous department of the Government is but a trifle over three million."

And so on the floor of the Senate in the previous year, when post-office matters were under consideration, vigorous and warning comment was made by a Senator on "the immense influence of an army of dependents amounting to more than ten thousand men."

The attempt at revision amounted to nothing, and since the creation of the office of third assistant postmaster-general in 1836, who, with the first and second assistants, was, until 1853,

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directly appointed by the Postmaster-General, and subject to removal by him,* there has been no distribution of powers or redistribution of functions from 1794 until the present time.

The whole body of statutes, following the old theory of organization, has provided and continues to provide, in terms, that the head of the department shall perform the functions necessary to the postal service, leaving the organization, and the assignment of parts and duties of all subalterns, to be fixed by his regulations and orders. Clerks have been added from time to time, who have no direct responsibility save to him, and it is even contemplated by Congress to supplement the present acreage of departmental buildings, in order to provide accommodations for an ever-increasing army of departmental employees; in persistent adherence to the primitive scheme, as clearly outgrown as population, material wealth, and all conditions of the current period have outgrown those of one hundred years ago. Could the men of 1814 and 1831–'32, instinct with the principle of local self-government, freshly endowed with its blessings, and alert to defend it from dangers, have foreseen the settlement of the country and the present proportions of the postal service, nothing could have withstood their determination to bring this governmental agency, now so nearly affecting every citizen, close to and in touch with the people.

The cost of the entire service in 1840 was about four millions and a half; less than one-eighth of what the head of the department now pays out on his contracts for the carrying of the domestic mails alone. In 1850 the gross expenditure was a little over five millions, or about equal to the present business of the New York city office. In 1860 it was a little over nineteen millions; in 1870, a little over twenty-three millions; in 1880, about thirty-six and a half millions; and for the year ending June 30, 1890, the estimate submitted to the Secretary of the Treasury places the expenditures at nearly sixty-seven millions. There are employed in the service more than one hundred and seventy thousand persons. At the close of this fiscal year there will be sixty thousand post-offices and postmasters. The cost of our service is about double that of Great Britain and France combined, exclus-

* The duties of these officials, although they now hold commissions of the President, by and with the advice and consent of the Senate, are still prescribed by the Postmaster-General.

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ive of the cost of their telegraph service. It is twelve to fifteen millions of dollars in excess of that of the German Empire, including the cost of their telegraph service. We handle more than double the pieces of mail matter of Germany and France combined, and over a million and a quarter of pieces more than Great Britain. For the year ending June 30, 1888, not including carrier routes in cities, the length of the mail routes in the United States was four hundred and three thousand nine hundred and seventy-six miles, while those of Germany were eighty-six thousand miles, of Great Britain, forty-five thousand miles, and of France, sixty-six thousand miles. For the same period our mail transportation service covered upwards of two hundred and eighty-seven millions of miles.

The money-order system did not go into operation until November 1, 1864, and the balance-sheet of the business done by this division of the department shows a total business of disbursements and receipts for the year 1888 of nearly two hundred and sixty-five million dollars. Postage-stamps were first used under the act of March, 1847, and stamped envelopes in 1853. In 1888 the department issued nearly two billions of stamps and nearly five hundred million stamped envelopes. Postal-cards were not issued until May 1, 1873, and in 1888 there were issued by the department about four hundred millions. The first of the registry system was July 1, 1855, and in 1888 there were registered about fourteen million pieces of matter. Free delivery service was established July 1, 1863, and the appropriation by Congress to defray its cost for the present fiscal year is eight million dollars.

These are but a few of the general heads of greater magnitude in the affairs of this branch of the government, the details of all the annual transactions of which, in the most concise form, now require, in the report to Congress, an 8vo volume of one thousand pages.

The business has to do with every city, village, hamlet, and home in the land; the field of its performance is our vast territory between the two oceans, populated everywhere. No agency of government, State, national, or municipal, so touches the individual citizen in domestic affairs and in his going and in his coming. He depends upon it for public intelligence and for private information; in his home life and in his vocations. As there are varieties in customs, business, habits,

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and occupations in a nation of widely-separated communities,—a truth at the foundation of American free government,—so the wants of our people as to the transmission and delivery of intelligence are in like manner diversified. It is an essential element in the principle of home rule, as applied here, that such agencies of the government as have most directly to do with the every-day affairs of men should be placed nearest the people as they live and move at home. This consummation is more readily attained, when practicable, by choosing the agent, or public functionary, from among the people to be served; but this is only an aid in reaching the object, which is satisfied when power is quickly receptive of knowledge of wants and of wrongs, and fully equipped promptly to supply the one and remedy the other. Although the other departments of the government in the country at large have more to do with special classes than with the people generally, yet in every case where their business touches the people of localities, they have their divisions of territory, with chiefs clothed with ample power, in the first instance, and in all details, to exercise their respective functions of administration. The Treasury has its customs collector, its district internal-revenue officers, and its sub-treasurers; the Land Office its district officers; the Pension Office its pension agents; the Indian Office its Indian agents; the Department of Justice, its district attorneys and marshals, and the War Office its department commanders.

In the postal service alone is there no one, save the Postmaster-General in his chief office at Washington, in general authority anywhere throughout the wide territory and the different divisions of the service. We have the local postmaster, but his power ceases when he has performed his function of receiving and distributing the mails. He is responsible to and reports directly to the Postmaster-General at Washington. He cannot remove a letter-carrier without the sanction of that officer. He can remedy no failure of transmission, nor can he expedite it. There are superintendents of divisions in the railway mail service, but they have only to do with the transportation of the mail under contracts and regulations made by the Postmaster-General. They can add no new route and can expedite no service. The postmaster is independent of these superintendents, and they of him. All complaints of service must go

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through the department at Washington for remedy. In practice, the Postmaster-General gains information as to the needs or the wrongs of a section of country by sending out one of his force of inspectors under the direction of the chief inspector, who is at Washington, and when that officer has time to report to his chief, and his chief to the Postmaster-General, the question of what to do may be determined. There is no lodgment of original and general power near the people served, and, of course, no responsibility to the people save from the Postmaster-General through the Chief Executive.

The Postmaster-General has the power of appointment and removal of all postmasters, except in the Presidential offices, which number less than one-twentieth of the sixty thousand. He establishes new post-offices when and where he sees fit, and appoints whomever he pleases as their postmasters. For offices of the first, second, and third classes, except in a very few cases where there are government buildings, he leases buildings. In a great majority of towns the post-office is in the centre of business, and a change of the office affects real-estate values, and may retard the prosperity of the town, and occasion the citizens great inconvenience. In these and a thousand other matters throughout the country action is taken without the possibility of a personal examination by the only official having the power to act.

What is demanded, and what must speedily come, is a distribution of the powers and responsibilities of the post-office establishment. A former head of the department, who was distinguished alike for his able administration and for patient and enlightened study of the whole subject of postal affairs, once suggested that there should be a postmaster-general in each State. A properly reorganized system will be one of territorial divisions, and their number and extent may be adjusted by a value standard of the business transacted from year to year; on the heads of these, who should have their offices and reside in their respective districts, should be conferred the powers and laid the responsibilities at present reposed in the Postmaster-General, save such as relate to the more universal interests of the country; and these should be defined in general and reserved in express terms to the central office at Washington.

The Postmaster-General should be permitted to devote his entire time and all his ability to shaping policies, improving

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systems, attending Congress with intelligent aid, exercising a general supervision over division chiefs, providing for the transportation of the great through mails, and in negotiating conventions and regulating our large and increasing postal business with other nations.

The other chief reform to which I have referred relates to the laws providing for carrying the mails and to the proper exercise by Congress of its power to establish and control post-roads. It goes without saying that railroad transportation has come to be a necessity in the mail service for which there is no possible substitute. There is absolute dependence upon this method as certainly as if there never had been any other. All relations, commercial or otherwise, are adjusted to modern and rapid methods of communication; yet the important branch of the government to which the administration of postal affairs is committed has no power whatever to serve this need, except by contract. It is clothed with no more authority in the premises than any private individual —*i. e.*, a right to contract if the other party will agree, and even after contract its power extends no farther than to withhold compensation in case of failure to perform by the carrier. It is a startling proposition that the only alternative method provided, in case any great trunk line should refuse to renew its contract for carriage, is that set out in the act of Congress, hereafter quoted, which authorizes the Postmaster-General in such case to send forward the mails "by horse-express, or otherwise"!

Existing legislation, adequate in the days of the stage-coach, the runner, and the road-wagon, when on the failure of a contractor the government itself was equipped and ready to operate its own post-roads, is entirely inadequate to deal with these modern methods; for this the government can command no substitute and no equipment, even were it practicable to move the mails independently over rails in constant use for other business, having no control of facilities, such as the telegraph, signal stations, switches, and like safeguards.

In respect of the absence of authority in the postal administration over railroads, to enforce the carriage of mails and for discipline, our law differs from that of every other civilized nation. It is true that Congress has provided that "all railroads and all parts of railroads which are now and hereafter may be in operation shall be post-roads." This is construed, however, as an

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act merely to enable the Postmaster-General to make contracts for carriage on those roads; for, strange to say, about the only function not conferred on that officer in connection with the service was the establishment of post routes. This was reserved to Congress. The highest judicial authority has construed the act just quoted as not conferring authority over the roads, so that it must be taken as a truth, however unpalatable, that the transmission of every mail in the United States, if we doubtfully except the Pacific land-grant roads, is subject to the will or caprice of the carrier, and not to the authority of the government.

In this state of things Section 3999 of the Revised Statutes provides the only remedy, which is as follows:

"If the Postmaster-General is unable to contract for carrying the mail on any railway route at a compensation not exceeding the maximum rates herein provided or for what he may deem reasonable and fair compensation, he may separate the letter mail from the other mail, and contract, either with or without advertising, for carrying such letter mail by horse-express, or otherwise, at the greatest speed that can reasonably be obtained, and for carrying the other mail in wagons, or otherwise, at a slower rate of speed."

The Postmaster-General will have exhausted his resources when he shall have gone to the limit of the power conferred by this act.

But what is far more necessary even than revision and amendment in this regard is the application of governmental authority and summary methods in dealing with railroads under contract. As the law stands, there is no method to compel the keeping of a contract on the part of a railroad company save the power to fine and deduct, which is always limited by the compensation earned. An examination of the penalties provided for delays, and for failures, for neglects, and even for unexcused failures to perform service, will show that they can in no case exceed what may be in the hands of the government, or what may come into its hands from contract earnings of the offender or defaulter. In the present condition of legislation, then, any company now carrying the mails may refuse to continue its contract and may stop the mails on any great trunk line with impunity.

The following is the provision under which fines and deductions can be made in such cases:

"The Postmaster-General may make deductions from the pay of contractors for failures to perform service according to contract, and impose fines upon them for other delinquencies. He may deduct the price of a trip in all cases where the trip is not performed; and not exceeding three times the price if the failure be occasioned by the fault of the contractor or carrier."

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It will be observed that while the language might seem to authorize unlimited imposition of fines, yet no provision is made anywhere for the enforcement of the penalty, save from the fund going to the contractor.

In dealing with this branch of the subject it is unnecessary to illustrate the defects in the law by incidents in the experience of the department. It seems to be enough for the purpose to point out the condition of legislation. It is proper, indeed, to state that, with rare exceptions, there has been cordial coöperation on the part of the roads of the country to give good and efficient service; but the department should not, in its dealings, be in a position where it must avoid issues as to its authority, and where, in case of extremity, its only resource—as was the case in one instance in my own administration—is to risk the assertion and exercise of a doubtful power, and an appeal to public sentiment.

It will not do to say, even if it were true, that the conduct of the railroad companies is so good that such legislation is not needed. The position is as indefensible as that of the Anarchist who claims that we need no law. It is the moral force of the existence of law which is effective for the preservation of order, rather than its application and execution.

There is no subject of such vital importance to an efficient postal administration, and, if the defect cannot be cured, there is no graver error in our system. Doubtless the impression is common, and has stood in the way of a remedy, that the needed legislation is beyond the constitutional power of Congress. This impression is erroneous, and on this subject the learning is both copious and authoritative. In favor of the power we find the liberal and the strict constructionist in harmony, and I have been unable to discover any recorded judgment, judicial or political, holding that Congress had not the power here contended for, under the following clause of the Constitution:

"The Congress shall have power to establish post-offices and post-roads; . . . to make all laws which shall be necessary and proper for carrying into execution the foregoing powers and all other powers vested by this Constitution in the government of the United States, or in any department or officer." (Art. I., Sec. 8.)

Mr. Justice Field, in delivering the opinion of the Supreme Court of the United States in *Ex parte* Jackson (96 U. S., pp. 727–732), says:

"The power vested in Congress to establish post-offices and post-roads has been practically construed since the foundation of the government to authorize, not

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merely the designation of the routes over which the mails shall be carried, and the offices where letters and other documents shall be received to be distributed or forwarded, but the carriage of the mail and all measures necessary to secure its safe and speedy transit and prompt delivery of its contents. . . . The power possessed by Congress embraces the regulation of the entire postal system of the country."

Mr. Chief-Justice Waite, in the case of the Pensacola Telegraph Company *vs.* West (96 U. S., p. 9), used this language:

"Post-offices and post-roads are established to facilitate the transmission of intelligence. Both commerce and the postal service are placed within the power of Congress, because, being national in their operations, they should be under the protecting care of the National Government. The powers thus granted are not confined to the instrumentalities of commerce or the postal service known or in use when the Constitution was adopted, but they keep pace with the progress of the country and adapt themselves to the new developments of time and circumstances. They extend from the horse with his rider to the stage-coach, from the sailing vessel to the steamboat, from the coach and the steamboat to the railroad, and from the railroad to the telegraph,* as these new agencies are successively brought into use to meet the demands of increasing population and wealth; and they were intended for the government of the business to which they relate at all times and under all circumstances."

The power extends to authorizing what in the judgment of Congress may be necessary measures to secure the object for which the power was conferred. Competition is not permitted because it would tend to cripple the government and take the care of the mails out of its hands. The right to assume exclusive control and direction implies and demands, as necessary incidents, the right to protect the government from rivalry in this business and from being subject to the caprice or extortion of these government carriers enjoying the benefits and protection of the laws. Such a power would be of little avail if it were not coupled with the prerogative to fix the rates which the government would pay for carriage and to require and compel the service of such common carriers as are within the range of the sovereign power of control and regulation.

In the debates in Congress in 1862–'64, which arose upon the passage of the compulsory law of 1864 for ocean carriage, there is not one word of doubt as to the constitutionality of such a measure. Senator Collamer, who was eminent as a lawyer as well as a statesman and an ex-Postmaster-General familiar with the principles on which all postal legislation rests, said: "The committee saw no other way to secure it [the carriage of mails to California] but by providing that, if American ships will not take the mails at the price which the law fixes, . . . they shall have no clear-

* Congress has not yet made telegraph lines post routes, though the power to do so is clear.

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ance." Senator Sumner spoke of the measure as one in which Congress ought to act "as a provision to enable the Postmaster-General to carry the mail and as one necessary to meet the emergency of the public service."

Congress, of course, possesses the entire and exclusive power to legislate on this question, and the interpretation has never been doubted that, under the power "to establish post-roads," Congress could, if necessary, invoke the power of eminent domain to lay out and construct necessary roads where none exist. In the words of Judge Story,

"The whole practical course of the government upon this subject from its first organization down to the present time, under every administration, has repudiated the narrow construction of the words above mentioned [*i.e.*, 'to establish post-offices and post-roads']. The power to establish post-offices and post-roads has never been understood to include no more than the power to point out and designate post-offices and post-roads. Resort has been constantly had to the more expanded sense of 'establish,' and no other sense can include the object which the post-office laws have constantly included." (Story on the Constitution, sec. 1136.)

"The clear import of the word [establish] is to create and form and regulate. To establish rules of naturalization is to form and confirm such rules. To establish laws on the subject of bankruptcy is to form, fix, and pass them. To establish the Constitution is to make, fix, and erect it as a permanent form of government. In the same manner, to establish post-offices and post-roads is to frame and pass laws, and erect, form, regulate, and preserve them. Whatever is necessary, whatever is appropriate, to this purpose is within the power." (*Id.* sec. 1131, vol. 2, p. 67.)

It is well settled that the power to fix the prices which common carriers may charge for the transportation of freight or passengers resides in the proper sovereignty. The principle which is applicable is that where private property is affected by the public interest it ceases to be *juris privati* only. Property does not become clothed with a public interest when used in a manner to be of public consequence and affecting the community at large. When one devotes his property to a use in which the public has an interest, he, in effect, grants to the public an interest in that use and must submit to be controlled by the public for the common good to the extent of the interest he has thus created.

As stated by the Supreme Court in the case of Steam Navigation Company *vs.* Merchants' Bank (7 Howard, p. 332),

"The common carrier, in the exercise of a sort of public office, has public duties to perform from which he should not be permitted to exonerate himself without the consent of the parties concerned. He is bound to receive and carry all goods offered for transportation, subject to all the responsibilities incident to his employment."

"They [common carriers] are incorporated as such and given individual powers in order that they may better serve the public in that capacity. They are, therefore, engaged in a public employment affecting the public interest and subject to legisla-

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tive control as to their rates of fare and freight." (Chicago, Burlington and Quincy Railroad *vs.* Iowa, 94 U. S., p. 161.)

"Where property has been clothed with a public interest, legislation may fix a limit to that which, in law, shall be reasonable for its use. This limit binds the courts as well as the people, and if it has not been properly fixed, the legislature, not the courts, must be applied to for the change." (Peck *vs.* Railroad, 94 U. S., p. 178.)

When we consider that no new legislation can be had as to the carriage of the mails except by Congress, and that Congress represents the sovereignty having exclusive control over the subject, it follows that, as to railroads or other carriers, it may provide for the certain, speedy, and prompt delivery of that species of freight which is defined to be mail matter, and that the power of restriction as to the rate to be paid for handling and delivery is a necessary incident to the effective exercise of the power.

It has been suggested that, as to some railway corporations created by State legislatures, there is no power to interfere with their rates and charges because their charters are in the nature of contracts under the doctrine of the Dartmouth-College case. A complete answer to this suggestion is that no State by the granting of a franchise can interfere with the powers granted to the Federal Government and not reserved to the States under the Constitution. Every charter must be accepted by a corporation with the implied, if not expressed, condition that it is accepted subject to the laws of the United States relating to those matters over which the Federal Government has exclusive jurisdiction. As stated in the case of Sinnott *et al. vs.* Davenport (22 Howard, p. 242),

"The appropriate application of that part of the clause which confers the same supremacy on laws and treaties is to such acts of the State legislatures as do not transcend their powers, but, though enacted in the execution of acknowledged State powers, interfere with or are contrary to the laws of Congress, made in pursuance of the Constitution. . . . In every such case the act of Congress or treaty is supreme, and the law of the State, though enacted in the exercise of powers not controverted, must yield to it."

Thus the power of the government to tax corporations has never been called in question. And such rates as are fixed by the State authority are subject to the regulation of inter-State commerce under the constitutional power conferred upon Congress to regulate commerce.

The constitutional grant of power to Congress on this subject is, if anything, in stronger terms than that which confers the prerogative to "regulate commerce," and it furnishes an analogy in

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construction. Said Chief-Justice Marshall, in the leading case of Gibbons *vs.* Ogden (9 Wheaton, 103):

"It is the power to regulate; that is, to prescribe the rule by which commerce is to be governed. This power, like all others vested in the Congress, is complete in itself, may be exercised to its utmost extent, and acknowledges no limitations other than are prescribed in the Constitution."

Following that exposition, in the case of Mobile *vs.* Kimball (102 U. S.), the Supreme Court uses the following emphatic language:

"That power is in the Congress without limitations. It authorizes Congress to prescribe the conditions upon which commerce in all its forms shall be conducted between our citizens and the citizens of other countries, and between citizens of the several States, and to adopt measures to promote its growth and insure its safety."

With the prerogative and duty to legislate clearly apparent, it may still require a few more striking illustrations of the fact that the railroad carrier, and not the Government, is master of the situation, to transform the suggestion for revision, frequently presented to Congress, into an imperative demand from the source of power.

DON M. DICKINSON.

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THE TYRANNY OF LABOR ORGANIZATIONS.

BY AUSTIN CORBIN.

IN ANY discussion of the relations between employers and employed, it is a mistake to assume that the former are always wealthy capitalists. There can be little doubt that in the vast majority of cases employers are not men of great wealth, or even of independent means in many cases, whether considered in respect of the aggregate of capital engaged in productive industry or in respect of the number of the employers as a class. While the capital employed by them, great or small, is an important element, their individuality, or, rather, their personal domination and control of their affairs, is the prime factor in the success or failure of their business. In other words, their labor is more important than their capital in the production of successful results. So it is in cases of corporate enterprises; these are owned in a majority of cases by aggregations of holders of comparatively small amounts of capital, who, by putting their savings together, and through the employment of competent managers, are able to conduct active business of great magnitude, more or less profitable, according to circumstances, and employing vast numbers of wo[illegible] skilled and unskilled. Hence the wage question is one in which capital, as such, is only remotely concerned. It is primarily and essentially a questio[illegible] between the employers and the employed.

Until within more recent years the employer was not denied the right to engage for his service those whose skill, energy, and character commended them as the best for his own interest to employ, at such wages, for such work, and such hours of work as should be mutually agreed upon; and the workman was not denied the right to seek and obtain the work and wages to which his skill in his craft and his individual industry and energy en-

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titled him. The employer was not denied the right to dismiss an inefficient worker, or any workman when his services were no longer required or desired, except, of course, in cases where specific time-contracts entitled the workman to his wages when, without fault on his part, the work for which he was engaged was not furnished. On the other hand, there never has been a time—and it is fair to assume there never will be—when employers, and public sentiment as well, have not fully conceded to the worker the right to better his condition by leaving his employer's service and obtaining more congenial or suitable employment elsewhere, at his pleasure. The worker in this country at least, under the law, happily, is not a slave; he owes no permanent service to anybody; he is a free man, as he ought to be, and nothing save his own environments, for which no employer can be justly held responsible, can compel his service at any time or place or to any man or set of men. This unbounded liberty of choice of employment and of employers, always left open to the workingman, has been, I might almost say, at the foundation of the progress of this nation. It is true that for generations, in some foreign countries, the tyranny of trades-unions has dominated the lives of a majority of the working people, and only those have been able to escape from it whose indomitable energy, skill, and perseverance have carried them up out of the ranks.

With other good, bad, and indifferent importations of foreign products, we have found ourselves, within recent years, to have acquired a body of professional labor agitators, which has been largely reënforced by lazy imitators of domestic growth. These, both foreign and domestic, find it much more congenial to their idle habits and tastes to assume the rôle of grand knights, grand masters, and walking delegates, with salaries attached and expenses paid, than to earn an honest living by earnest work, as the genuine workman gladly does. The unagitated workman does not pay dues; hence the necessity for agitation, as a means of producing the fund for the payment of these salaries and expenses. Like other phenomenal social and political movements which have had their birth, growth, and decline, this labor agitation assumed the methods of leagues and societies, with forms and ceremonies, oaths and penalties, mysteries and fearful punishments, and, withal, parades and paraphernalia generally. These, and all the like, would be harmless, and are, until they

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come within the legitimate domain of the laws of *meum* and *tuum*, upon which our government rests. In lieu of the individual liberty of all workmen which had prevailed in their relations toward their employment, their families, and the state, a new formula was invented and enforced by these self-constituted authorities. Employees then at work were compelled to abandon their duties unless and until the requirements of the league or order were complied with. These demands included rates of wages fixed by the order; hours of labor also arbitrarily fixed; the confinement of help employed to members of the order; an arbitrary uniform scale of wages for all employees engaged in certain forms of work, applicable to all alike, with a limit placed upon the number of young men who should be permitted to learn the trade or craft. These, with an infinite variety of minor regulations, were intended to leave the employer entirely dependent upon the dictation of the managing body of the league or society which his workmen had been induced to join.

It is obvious to all business men, and doubtless also to the majority of intelligent workingmen, that the continuance of this sort of domination of the industries of the country would soon lead to the destruction of the business of all employers and of adequate wages to employees. No one objects to the formation of societies amongst workingmen to promote a better understanding of their craft, the cultivation of better acquaintance with each other and their families, or for the discussion of wages, the prospect of wages, or any other question they feel interested in for themselves or the country in which they live. Business men organize associations for such purposes, and are continually widening their own spheres of observation and usefulness by such conferences; and in the domain of the mechanical arts there are constantly forming new societies for comparison of views and experiences and the promulgation of knowledge concerning the matters of which they know. But these, and such as these, are not dominated by unprincipled demagogues, whose sole purpose is to live by the labor of others; they are unselfish bodies of men who are only too glad to let their light shine, and to teach the new generation what they have learned from their philosophy and experience.

The workingmen of this country, whether belonging to trades and occupations reached by the professional labor agitator or not,

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are amongst the best citizens of the nation. They have no other desire than to deal justly in all their relations, whether as employers or employed. They are industrious, intelligent, quick to learn all that is to be learned, and soon become expert in the business they undertake; they are of good habits, and are, beyond question, as a rule, amiable and willing; they furnish the bone and sinew of the Republic, and, through themselves and their children, form the anchor of our hope for the future. There is no country on earth where so many men starting out in life without a dollar, and with nothing to rely upon but their native industry and good sense, have forged ahead to front places, and where the like possibilities are open to all. Multitudes of our most prominent and wealthy people have come from the ranks; all the learned professions and the highest grades of scientific attainment are full of illustrations of the rule. Most of those who have made the greatest impression upon their generation, in their young days wrought with their hands for small pay, and none of them are ashamed of it. It is their just pride that their own industry and energy, and their thorough loyalty to the interests of those who trusted and employed them, have been the foundation upon which their prosperity was built. Not a single one of them all owes his prominence and success to the "labor unions." On the contrary, at least ninety-nine out of every hundred of them, to put it safely, would have failed to reach the positions they occupy, if their young energies had been throttled by the dictation of labor unions, or controlled under the espionage of a "walking delegate."

The recent development in this country of the destructive forms of trades-unionism, which sought practically the subjugation and mastery of all our workingmen and their subjection to the domination of an irresponsible central power, having a staff of paid functionaries under their control, was undoubtedly a serious menace to the peace and comfort of our honest wage-earning people, as well as to the industries of the country. Thousands upon thousands of respectable, honest, sober, and thoroughly competent non-union men were shut out of their legitimate employment by the whim of an idle and vicious class of men, who did not have the courage openly to become criminals, and outrage and defy society, but who chose to employ the machinery of these societies and the less intelligent classes of laboring men (aided not unfre-

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quently by accessions from the turbulent criminal class who are ever ready to join in every open outbreak against the public peace) to bring all workers within their influence and under their control. Men who preferred to preserve their personal independence were hooted through the streets of what are termed law-governed and law-abiding communities; denounced as "scabs," pelted with stones, beaten, stamped upon, and sometimes murdered, even in the very portals of justice. Instances have not been rare where the civil authorities were so craven as to desert the hapless independent workingman in the hour of his sorest need; and all this at the behest of Knights (save the mark) of Labor! It has been seen that in this, a country dedicated to personal freedom and independence with the best blood of hundreds of thousands of its citizens, such outrages may be committed in every village; that accounts of them may be openly recorded in multitudes of pages of the daily prints; and yet that the criminal records do not show a single case of adequate punishment. That such outrages have been repeatedly committed, and that the perpetrators, as well as the cowardly instigators, are left unpunished, is a disgrace to the civilization of the nineteenth century.

When it is known—as the writer of this article knows—that a large majority of the membership of these unions is composed of men who are there, not because they want to be, but solely because of their fear of peril to their employment or of suffering personal violence at the instigation of these professional agitators, it would seem to be the duty of employers and of law-makers alike to devise some means whereby those workmen who desire to own their own time, and to be masters of themselves, may be adequately protected in their right to be free from dictation and interference. Some employers have endeavored to accomplish this. They employ no new men who are members of any of the labor unions; applicants are required to promise not to join any while retaining their employment; those who prefer the unions are required to quit the service, and promotions are entirely confined to those of undoubted loyalty to their employer and his policy. The day of terrorism from the unions and their salaried and titled leaders is over in cases where this policy has been rigorously pursued. The walking delegate is not now doing much walking in the neighborhood of works of this class—at least not at the expense of the workmen.

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The writer has in mind cases where many thousands of men are employed under such circumstances; and he believes that there do not live an equal number of more honest, manly, industrious, loyal, and capable employees anywhere in any country. But each is, nevertheless, what the labor agitators and their deluded followers call a "scab"—*i. e.*, an independent, manly man, who seeks congenial employment at satisfactory wages, who attends to his work diligently, maintains himself and his family respectably, and is in all things a good, order-loving, and peaceable citizen. It is a title of nobility, indicative of traits of character which they can all afford to live and die by, and to hand down to their children. It is a great satisfaction to know, as the writer does, that the industrious, independent, and law-abiding element among the workingmen is growing fast in this country; and, if the employers of labor will show a tenth part of the independence and willingness to suffer temporary ills that their non-union employees do, there will soon be an end of the matter, and these indolent agitators, who figure only in conventions and newspapers as the friends of the workingman, with salaries attached and expenses paid, will fade out of sight and mind. Any case of real oppression of laboring men by cruel or selfish employers will speedily be detected and remedied by a just public sentiment, without violence to individual liberty or breaches of the public peace.

The natural tendency of these organizations of the destructive class is to keep apart the employer and his employee; whereas their proper relation, growing out of their mutual interests, is one of cordial friendship and respect. Each of them should take an interest in the welfare of the other; and this condition does prevail as a rule where they are both left free from the interference of outside meddlers. But the domination of the agitator could not possibly be maintained without the overthrow and destruction of this sense of mutuality. Therefore, under the teachings of the labor unions, their more ignorant followers are made to believe that their employers are tyrants ready at all times to take every mean advantage of them, and are utterly without sympathy for them or their families. On the other hand, the employer well knows that the union is a constant menace to his business; that his men are unable to consider with him any question of work or wages with any degree of independence, and that the fairest arrangement is liable to be set aside and his business

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destroyed at any moment by the arbitrary dictation of some "walking delegate" or "labor chief," acting under the order of some mysterious conclave, holding secret councils over the relations of the employer and his men. No matter how cordial and kindly may be the relations between the men and their employer, or how distasteful and repugnant to the men it may be to leave a service of which they have nothing to complain, suddenly comes an order from some leader whom nobody knows, but whose salary still goes on no matter how long the men remain idle, and in obedience to this mysterious mandate the men are compelled to quit work. Then comes the long, disheartening period of idleness. Those who have been thrifty, and laid aside a little store for a rainy day, see it gradually shrink away in supplying the necessaries of life for the family; others, who have not been so provident, dependent upon the charity of neighbors as poor, perhaps, as themselves, have seen the anxious faces of their wives grow paler daily, the wan cheeks of their children pinched for want of food, and yet, with an abundance of work offering at their doors, they are not permitted to win the bread for which there is such sore need at home. Such scenes have followed and always will follow in the path of the professional labor agitator.

Another tendency of these and similar unions is to dwarf the better classes of workingmen—those who possess skill, enterprise, and the ambition to advance themselves—and to reduce all classes, not merely to the level of the average, but to that of the lower grades, of the indolent and unskilled. No one is permitted to rise on his individual merits; as a consequence, the young workman, full of vigor and hope at first, deprived of the opportunity to attain the rewards which he feels he might reach, soon sinks, a dispirited and broken man, to the lower level of the companionship forced upon him by his order.

I do not believe that the time will ever come when labor-unionism will permanently control the great body of American workmen. If it does, it will produce a state of society wherein the workman will have neither the ambition nor the opportunity to improve his condition or ever to become himself an employer, and where the great mass of bread-winners will be reduced to a state of slavery infinitely worse, in every respect, than that in which the colored race were formerly held in the Southern States. White men, at least, revolt at the idea. They will not submit to

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such conditions. Surely there can be no form of slavery more abhorrent to our American people than that in which the head of some labor union is enabled to dictate when a man may, or must not, work for his daily bread; unless it be that more shameful and cowardly slavery of the employer of labor, who, in fear that he may lose something of what he has gained, or that he may fail to add to his gains, will permit a walking delegate, generally an utter stranger to himself and his business, to swagger about his premises and dictate the terms upon which he may be permitted to continue his business. The workingmen of this country should never lose sight of the fact that every labor agitation, even if only spasmodic and temporary, tends to destroy the smaller industries of the country which are scattered all over the land, whereby employment for all kinds of workers, skilled and unskilled, is found throughout nearly the whole of our diversified territory, and to concentrate all productive industries in the larger centres of population, where labor is abundant and cheap, where rents and the means of subsistence are comparatively dear, where squalor and wretchedness prevail, and where filth and disease most abound.

These views are especially commended to the attention of such of our legislators as have been inclined to yield to the spirit of trades-unionism and to limit the operation of the wise laws which were devised by our fathers for the protection of the individual liberty of the humblest workman. Freedom from dictation is the birthright of every citizen. The politician who seeks to take away its safeguards should be reminded that the people have long memories, and that sooner or later their just judgment will be visited upon the unfaithful public servant who, for personal political reasons, by unwise legislation strikes at the independence of the individual wage-worker and at his right as a free man to work at such trades, for such wages, and for such persons as he pleases, without dictation from any quarter.

AUSTIN CORBIN.

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OBSTRUCTION IN THE NATIONAL HOUSE.

BY THE HON. THOMAS B. REED, REPRESENTATIVE IN CONGRESS FROM MAINE.

IN THE British House of Commons, which has been the model on which all other parliamentary assemblies have been formed, there were, until recently, no rules for the closing of debate, and very few, if any, for coercing members to attend to their duties. All rules were made upon the assumption that each member would do his share of the public business either by voting for a measure or voting effectually or ineffectually against it. He felt upon himself only the burden of his individual action, and, being relieved of that, he was sure he had done all that could be required of him. If a member found that the motion he was to make was manifestly against the sense of the House, he was quite likely promptly to withdraw it; and, as I have been told, members would actually refrain from making speeches when they had a right so to do upon intimation of the House that silence was preferable. This last statement somewhat taxes the credulity of an American, but, of course, it may be so. Foreigners have strange ways. The House of Commons, in a word, proceeded, not by forceful rules, but by common consent, to legislate under the charge of the majority.

A few years ago all this changed. The Irish members began to overturn the custom so long existing, and to avail themselves of the latitude given by the rules to stop legislation and to bar governmental action. The scenes of disorder and confusion which followed have not yet passed from general recollection. Whether the conduct of the Irish members was justifiable and suitable, this is no place to discuss. Nevertheless, it is very certain that no one would undertake to justify their action except on the ground of liberty in danger and of unendurable wrongs which could be righted in no other way. In other words, parliamentary rebellion was justifiable only where the right of revolution existed. The result of such action, however, was the adoption of rules for

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closing debate, but rules much less stringent than had prevailed in all similar American assemblies for many years.

In the House of Representatives the rules, like those of the House of Commons, were made upon the very proper hypothesis that every member could be relied upon to do his public duty; that he would vote when the question was up, and would conform to the spirit and intent of the rules, and not violate them both while keeping to the letter. A motion to adjourn, a motion to take a recess, and a motion to adjourn to a future day are all motions absolutely necessary for the transaction of public business. It is supposed that each member who makes such a motion makes it not only because he thinks the House ought so to act, but also because he thinks it probably will so act. Any other course is a violation of that understanding on which all rules must rest. And yet a member may make one of these motions, may, indeed, make all of them, and repeat the series again and again, without himself believing that either ought to be adopted, and without the slightest expection that either will be adopted. In such a case, the member is simply availing himself of the forms of rules intended to facilitate business, for the sole purpose of obstructing business.

Again, whenever bills are presented to the House for reference to appropriate committees, any member can demand that a bill be read. This is an obvious right; for upon the contents depends the reference, and on that members may be called to vote. In making such a request, which is not usual, since in ordinary cases the bill is sure to go to a suitable committee, the member ought to be actuated by a desire to ascertain the contents of the bill in order that he may be prepared to vote intelligently on its reference if called upon. But it has many times happened that the member himself has introduced, for the purpose of demanding their reading, long and tedious bills in which he had no interest—bills already before Congress—in order that, by mere consumption of time by the reading clerk, the legislative day might be wasted on which two-thirds of the House would otherwise have voted to pass a bill which was obnoxious to this single member.

A provision of the Constitution has been wrested from its original design and made the corner-stone of the rampart of obstruction. The Constitution provides that, whenever one-fifth of

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the members desire it, the yeas and nays shall be entered on the journal. This calling and recording of the yeas and nays undoubtedly had no other purpose than to give more formality and sanction to the act of voting, and to inform the people how in important junctures of public affairs their representatives had acted. So completely has this provision of the Constitution been turned from its original purpose that I should not be surprised to find that double the number of pages of the House journal had been wasted in the record of yeas and nays on frivolous motions than had been used to record all the votes on serious questions. The flagrant abuse of this provision of the Constitution goes far to justify Roger Sherman's desire to have it stricken out altogether.

Two flagrant cases of misuse of power placed in the hands of individual members occurred in the last Congress, which illustrate both modes of action to which reference has been made.

During the war a direct tax was levied and duly apportioned among the States. Some of the States paid and some refused, and on property in still others the federal authorities partially collected the tax. Obviously either all should pay this tax or none. Either it should be refunded to those States which did pay or be exacted from those which did not. We had an overflowing treasury, the surplus in which used to excite much sympathetic and frightened utterance; but now, singularly enough, the opposition newspapers are thereon mainly silent, although it has somewhat increased. With such an abundance to pay with, the proposition to repay those who had paid, rather than harass those who had not, would seem to have been a wise course. But whether it would or not, it was evidently a case of importance enough to have its day in court and be decided by the ultimate tribunal. Yet a small faction of the Democratic party, by the aid of dilatory motions and the abuse of the Congressional right to have the yeas and nays, after the consumption of the most valuable days of the session, drove in the Northern Democrats and postponed the measure to a session beyond the election, when President Cleveland, not having before him that fear of the people which might have been to him, as to most politicians, the beginning of wisdom, was able to slake his thirst for vetoes on something of greater pecuniary value than a soldier's pension.

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The other example of the exercise of power according to the letter and against the spirit of the rules was that of the Union-Pacific Funding Bill. Under the rules of the House, on two Mondays in each month, after the presentation of bills, the rest of the day is set apart to enable the House, after a short debate, to pass bills by a two-thirds' vote, or so to suspend other rules as to enable particular measures to be considered on special days. On the day when the Funding Bill was to come up, a member not content with the fact that the question of considering the bill would be so presented that his one vote against consideration would overbalance any two votes the other way, determined to make himself equal to the whole House. He therefore introduced a bill already before the House—a bill, if I mistake not, to provide for the codification of the laws of the District of Columbia—and demanded the reading of it. Of course, that was sure to finish the day, either by an early adjournment or by exhaustion. Without in any way entering into the merits of the bill, it is enough to say that it was a project to settle with the largest single debtor of the government. The plan of settlement had received the approval of a commission specially appointed by President Cleveland and of a committee appointed by Mr. Carlisle. Whether, after full discussion, the plan of settlement would have stood the test of examination, I do not pretend to say; but it does seem as if, under a republican form of government, two-thirds of the House of Representatives ought not to have been deprived of the power to say whether the subject should be discussed or not.

What is a legislative body for? It is not merely to make laws. It is to decide on all questions of public grievance, to determine between the different views entertained by men of diverse interests, and to reconcile them both with justice. It must in some form hear the people. A negative decision by a legislative body is of as much value to the community as a law. Time is not lost when cases are investigated and action refused. Half the grievances of mankind turn out to be unfounded as soon as somebody is found to listen to them. The law courts decide cases according to law already made, but there is a large class of cases too indefinite for general laws, or which have grown up since general laws were passed, which demand the attention of a body capable of making laws to suit cases. A legislature is the court of very last resort. Therefore it would seem as if it should have such rules of action

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as would make the majority efficient. Our government is founded upon the idea of majority rule. There can be no other government by the people.

The citizen, as such, is relieved from government by the majority only in those cases provided for by constitutions. Constitutions are the charters of the rights of minorities, and they have no other. When a legislative body makes rules, it does not make them, as the people make constitutions, to limit power and to provide for rights. They are made to facilitate the orderly and safe transaction of business. Members are representatives, not acting in their own right, but in the right of their constituents. As a body, they represent the whole people of the United States, and have, therefore, no right to limit their own power. Rules should not be barriers: they should be guides.

Men speak of the minority in the House of Representatives as if it were political and always the same—a body fixed and definite, which it were wise to endow with power of its own and for its own advantage. But the minority is a shifting quantity. Not a third of the questions—perhaps not a tithe—are political. Divisions more often run lengthwise of the hall than across it. Hence it is absurd to talk about the rights of the minority as such. The rights they have, and ought to have, are simply those which will serve to guide the whole House acting by its majority to safe and correct conclusions. The right to debate itself, than which nothing ought to be more sacred, is a right conferred, not for the benefit of the individual member, but because by debate alone can all the facts and reasons be brought out which will enable the whole House to make sound and wholesome laws. If time were eternity, or men were angels, there should be no limit to debate. But in the House of Representatives men are not angels, and even time is limited to five hours in the day and six months in the year; and therefore debate is much abridged. I have been inclined to think it has been too much restricted; but there seems to be no remedy except in a changed sentiment in the House. When debate becomes the rule and speech-making the exception, we shall have a better state of things in that regard; for speech-making contributes more than anything else to the ruin of debate.

Among the fears that are sometimes entertained, whenever a proposition is made that wiser rules shall be adopted, is the fear

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lest precipitate action, soon to be repented of, will be taken. There was never any fear so groundless as that. The inertia of a legislative body of three hundred men is something enormous anywhere, but is greater, perhaps, in the House of Representatives than anywhere else. There are, and can be, no parliamentary bodies of large membership which can transact business expeditiously. With the greatest liberty new rules could possibly give to it, the House could never pass upon one-fifth of the business presented. With this fear of precipitate action goes the other fear that there would be less debate—less opportunity to present objections and discuss amendments. This fear also is without foundation. Indeed, one of the incentives now to the cutting-off of debate is the fear that it may be used by the unscrupulous in aid and furtherance of delay and dilatory motions. If dilatory motions were reduced to their lowest limit, or, even as such, entirely abolished, there would be greater facilities for action and consideration; and therefore there would be a greater chance for debate, and the danger of unwise laws would be much lessened.

The present system is capable of indefinite abuse, and the actual abuse is increasing every year. For all the period preceding the year 1882, it was always a point of honor not to use dilatory motions in an election case. It being the duty of the House to determine the election of its own members, and its own character being determined by its membership, to prevent a decision upon a contested-election case seemed to undermine the very foundations of parliamentary government. But in 1882, taking advantage of the great confusion into which the death of Garfield and the circumstances which followed had thrown their opponents, the Democrats refused to vote in an election case, and, when a quorum of Republicans was obtained, refused even to let them vote. This illegitimate warfare was carried on to the complete stoppage of all public business, until the House, by a change of its rules, summarily took away the power of using dilatory motions in election cases, and thus put down the parliamentary rebellion. To the credit of the sound sense which the Democratic members had, even when much excited, it should be added that, though they indulged in a somewhat vaporous protest, not one single member of them all will be found recorded against the decision of the Speaker which brought them to terms. This sensible change in the rules was abrogated on the return of the

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Democrats to power, and filibustering in an election case has ceased to be rare. If this is to continue, the day is not distant when the House will cease to be what the Constitution says it shall be—"the judge of the elections, returns, and qualifications of its own members." It has already come to pass that "a majority" is by no means certain to "constitute a quorum to do business."

Nevertheless, all this use of what are called dilatory motions had a reasonable origin and a reasonable cause. It has often been of great value. Sometimes majorities, in what Mr. Jefferson calls "the wantonness of power," have tried to trample down the very safeguards which were intended to preserve them from inconsiderate action. Sometimes majorities have refused the right to debate, on which rests all sound action by deliberative bodies. Sometimes, also, attempts have been made to rush through the House measures of great public importance with no previous notice, without giving the country a chance to be heard in cases where the people's voice, if heard, might be potential. Dilatory motions have often, in such cases, been justifiable and justified. But in those days men used their power to delay with a suitable fear of the consequences. It had to be a good case or the sentiment of a member's own party and the general sentiment of the House soon made it clear to him that he had better abandon a measure so radical. Even a practically unanimous party could not long keep up wanton obstruction. To-day the question is between certain possible benefits and certain assured evils. The sentiment of the House seems no longer able to restrain individuals, and a real public sentiment has not yet been aroused.

The next House will contain no large and successful majority tempted by its largeness and success to ride over the minority. Thus far, the majority seems to be but three, and a majority of three will hardly cover the percentage of loss from sickness and disability. Even if the Territories should add an unbroken band of five, there will then be but three above a quorum; which is hardly enough for business, let alone tyranny.

Undoubtedly, some effort will be made next December to change the rules so that business can be done and the scandals of the last Congress avoided. I ought not to have written the the words "to change the rules," for that conveys an entirely incorrect idea. No rules have to be changed, for the new House will have no rules. What should have been written is that there

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will be an effort to establish rules which will facilitate the public business—rules unlike those of the present House, which only delay and frustrate action.

Whether the new rules will simply go back to the days before Mr. Randall was Speaker, or will have changes more or less important than this would be, nobody but the House can say; but the people of the country ought with one voice to help and support any honest effort to do business and to shorten Congressional sessions.

It has been urged as one reason why an extra session should be called in November that the Democrats in the House will struggle against any new rules, even to the extent of reviving and illustrating by another example the scandalous scene of the year 1882, when for days and days they prevented the House from performing its constitutional duty of passing upon the question of the election of a member. I do not believe this to be possible. In 1882 the rules of that House had been adopted, and yet when the House put an end to the Democrats' defiant action by proposing to sustain the Speaker's decision against them, not one of them voted against sustaining the decision, and all were silent as their names were called, when by a unaminous vote of the House an appeal was laid on the table.

The case in December will be much simpler. The House will meet without rules, and must make them. They must be made by the majority of the House, for no one else can by any possibility make them. To suppose that the opposition will refuse to do their legislative duty unless they can dictate the rules is the wildest dream of parliamentary insurrection that ever presented itself to human vision.

But whether they venture on this action or not, the whole subject needs the sunlight of public opinion. If the American people do not get a Congress such as they wish, and legislation such as they need, it is entirely their own fault. I do not mean that they might have elected better men and are therefore to blame. They are at fault if they do not see that the work is done after the men are elected. Public opinion is the ultimate governing power, and if the people were thoroughly in earnest to prevent the waste of time and the injustice of delay involved in bad rules and worse practices, they would find that their servants would no more defy them than they would him who put into their nostrils the breath of life. THOMAS B. REED.

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THEATRES, HALLS, AND AUDIENCES.

BY DION BOUCICAULT.

In 1854 Tripler Hall, on Broadway, New York, was burned. It stood on the site now occupied by the Grand Central Hotel. In the same year were built the Metropolitan Theatre and the Lafarge Hotel, covering the same ground. This theatre measured one hundred feet in width by one hundred and fifty in depth. The curtain opening was sixty feet in width—by far the largest in the world. After struggling vainly for five years, the elephantine theatre came to grief. I pointed out to Mr. Lafarge its unwieldy size as the cause of its failure;—no management could successfully deal with such a leviathan. He confided the building to me, and I scooped out the interior down to the foundation, leaving only the walls and roof standing, and within this space a theatre was erected about the size of the Star. We called it the Winter Garden; it was successfully managed until its destruction by fire in (I think) 1866 or thereabouts.

In 1857 the Academy of Music in Philadelphia was built. The object which inspired its proprietors was to have a theatre which should surpass in size any theatrical building in the world. So, on the plans of this monument were traced the outlines of the Scala, the San Carlo, the Covent-Garden Opera-House in London, the Boston Theatre, to show how very much larger was the Philadelphia monster. Amongst the eminent stars that made their appearance there during its opening season came Charles Mathews, the English comedian. He pronounced the Academy a magnificent affair as a theatrical monument, but suggested that every spectator be provided with a telescope and each actor with a speaking-trumpet.

In 1864 the Albert Hall in London was projected, dedicated to the Prince Consort, then recently dead; this hall was to be

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devoted to concerts, to fine-art meetings, and exhibitions. The ground was given by the government conditionally on the subscription of a certain amount by shareholders in the building. The payment of $5,000 entitled the subscriber to a private box. I was one of the box-holders that hastened to support the scheme. When the plans were set forth, it was found that the auditorium was to be of proportions so enormous that Langham Church steeple and spire, if set in the midst of the pit, would not reach the proposed ceiling. I ventured to point out that such an auditorium would be found unfit for speech; and even for music it would present all the objections that singers and instrumental performers find in open-air concerts, including, possibly, sundry echoes to distract and confuse the sound. These objections were set at nought; and the Albert Hall was opened by the Prince of Wales in the presence of ten thousand spectators. We cannot call them an audience, as not a word His Royal Highness uttered on this occasion could be heard. The result verified all the objections raised. Then came the remedies. Amongst others, a huge *velarium,* or swinging canvas ceiling, was suspended with lines over the orchestra; but these contrivances failed to mitigate the trouble, for the trouble was and is, simply, that the human voice can fill an area containing only a certain number of cubic feet, and the eye of the spectator can see only within the scope of human vision. These limitations seem to be self-evident, but our ambition and pride continue to ignore, or, at least, to disregard, them.

The most powerful and articulate voice, when used in speech, can fill an enclosed area of 320,000 cubic feet—that is, a room eighty feet in breadth, eighty feet in length, and fifty feet in height; and to fill even this space perfectly the speaker should be aided by certain conditions, which are to be found in the peculiar arrangement of a theatre. Let us assume that the stage and auditorium, taken together, represent an enclosure one hundred and twenty feet in length, eighty feet in breadth, and fifty feet in height. The speaker would stand at a point with eighty feet in front of him and forty feet behind him, this forty feet representing the stage. But this forty feet is contracted, practically, by the hanging scenery above his head, which packs that space closely, excepting twenty-five feet, which is the height left clear on the stage. At the sides scenery on

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frames stands in the entrances, packed so closely as to leave about thirty-six feet clear. Thus the speaker finds himself boxed in an area thirty-six feet in width, twenty-five feet in height, and forty feet deep. From this chamber he directs his voice into the auditorium eighty feet in depth, eighty feet in width, and fifty feet in height. The auditorium, packed with an audience and brilliantly lighted, generates considerable heat, while the stage remains at a much lower temperature; this state of affairs causes a current of air to flow continuously from the stage to the auditorium. It carries the voice of the speaker with it. The draught is very sensibly felt by the spectators at the moment when the curtain is raised, and its presence may be detected by the movement of the curtain, which tends invariably to distend, or "bag," towards the audience, under the pressure of the colder air on the stage, so that in some cases the curtain must be anchored down or held on sliding rings at the sides, that run down on fixed wires or rods; without which tension the curtain would be blown out over the orchestra.

Here let us pause to agree on some convenient and proper nomenclature to designate the several parts of a theatre. Some years ago I ventured to invent the word *auditorium* to express that portion of a theatre occupied by the audience, and being in front of the foot-lights. I was subjected to some ridicule for this piece of pedantic presumption; but the word was really wanted, and it stuck. I now propose to call that portion of a theatre occupied by the stage from the curtain backward the *scenarium*. The portion in front of the curtain and between it and the foot-lights is called the *proscenium*. This small space belongs to the scenarium when the curtain is up and to the auditorium when the curtain is down.

With all the advantages enumerated for the conveyance of the voice in theatres, which no other form of auditorium affords, still we have never discovered the principles applicable to the proportions of a great hall by which the voice is spread and conveyed evenly and in the most perfect manner to all parts. After the building is completed, it is, confessedly and notoriously, a matter of accident, and a question to be solved by experiment, whether it is "good for sound." When it proves to be defective, no one can explain why it is so, or where the defect lies, or prescribe a remedy. Echoes will be discovered nestling in one spot;

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reverberations confusing the voices will be found in another; a person seated thirty feet from the speaker will hear with difficulty, while his voice reaches one seated seventy feet away distinctly. This hall, containing 300,000 cubic feet, is easily filled by the voice, while in this smaller one, not containing 200,000 feet, the speaker is at great trouble to make himself heard. If acoustics were an exact science, would there be, could there be, any doubt or error in these matters? By experiment we are led to believe that the domed, the arched, the groined roof is bad for sound; and, therefore, in cathedral churches, where it has been found, chanting was used and a musical service became essential: the long, open, sonorous notes which characterize sacred music were, I suspect, an architectural consequence. Those who have listened to a preacher holding forth in a sermon after the anthem may have noticed how unfit such an auditorium is for speech.

Some sixteen or eighteen years ago I visited the great Mormon Temple in Salt Lake City. I have not the precise dimensions of the building, but it certainly contained considerably more than 320,000 cubic feet. Mr. Brigham Young assured me that the voice of a speaker was audible in all parts of this vast area. There is no reason to doubt this statement, and it is mentioned here as a remarkable exception to the general rule. The temple, as well as I can remember, was oval in shape, covered with a flat ceiling coved to meet the walls. From this form I should have expected echoes and over-resonance; but I was informed that there were no such results. The single instance of the Mormon Temple should be received with this reserve: admitting that the voice was audible, what voice was used? The only fair test is by the use of a clear articulate organ, full and resonant, but not forced so as to lose variety of inflection; for we speak on many notes, but in shouting we use only one. So public speakers accustomed to open-air eloquence adopt a monotonous and artificial rant. It is not by such shouting that an auditorium should be tested. In shouting the vowels are excessively used, for we cannot shout a consonant. The consonants give clearness of articulation: earnestness of expression depends on their use. The vowels give sweetness of speech and volume of tone: they are the powder which drive the shot. The secret of being distinctly heard is not loudness of voice, but clearness and crispness of articulation, and that natural, familiar inflection which helps to

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convey the meaning of your phrase by its intonation. It is important that the first few words of a speaker be distinctly heard: if they be so, the audience at once lend silence—in itself a potent assistance; whereas if they fail to hear, they will turn aside, and inattention takes many forms of disturbance. The monotone of a Mormon preacher, accustomed to open-air elocution, might with his semi-chant have filled the temple, when a voice limited within its natural compass, and reserving all its uses of inflection, might not be heard.

And here it may be proper to offer the statement that, amongst all the musical instruments, a perfect human voice is the most powerful, surpassing the ear-piercing fife or the brazen trumpet, surpassing in power an orchestra of one hundred and fifty instruments or a chorus of four hundred ordinary voices. Many years ago I attended a monster concert given at the Crystal Palace, London, where the executants numbered, I believe, these figures. Our party, arriving late, were hurrying up the long ascending glass-enclosed corridor that flanks the gardens and conducts to the concert-hall. As we approached, we heard one full and rich note; we stood a moment; it came from the throat of Sophie Cruvelli. As we hurried on, we began to hear faintly some of the brass instruments in the orchestra; nearer still, we began to hear the chorus and the orchestral accompaniment; but soaring out and above all came the clear soprano notes of the singer, easily leading four hundred and fifty contending sounds. The body of sound made by the combination of five hundred sounds does not extend further or fill a greater area than each single sound in the combination. It is like five hundred people throwing stones; the air within a certain region will be full of stones, but not one stone will reach further than its fellows.

When monster concerts were beginning to become popular, Balfe, the composer, and I visited one of them, given I forget where. In the orchestra were upwards of one hundred and fifty executants; of these, of course, two-thirds were strings. Mario came forward and sang. After his pure rich tenor voice rose like a lark in the first bars of the recitative, down came a hundred strings in a thumping chord. It was out of all proportion with the voice. It was an outrage on the ear.

"Balfe," I said, "what do you call that? To me it sounds awful."

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"'*C'est magnifique,*'" he replied, "'*mais ce n'est pas la guerre!*' But we are monstrefying everything, as if size and extremity were elements of art. We are tearing the throats of our singers to get one note higher in the compass, to arrive at which we spoil all the rest of his voice. If a fellow can scream a C sharp, he has a fortune, but a D makes a millionaire. Listen to that!"

Mario was singing the tenor solo, from the "Borgia."

"In twenty years hence," continued Balfe, "there will be no such voices heard. Quality will yield to quantity. They will cease to make a Stradivarius. It will all be yell and row-de-dow."

"In an orchestra of those gigantic dimensions, is it easy to hold it all together in perfect unison?"

"You may say, 'Is it possible?'" remarked the musician. "Precision in time and of tune suffers when the orchestra and chorus are too wide for the scope of the conductor. I doubt if perfect execution can be obtained by an orchestra of more than eighty pieces—that is, eighteen on the brass, twelve on the wood, and fifty on the strings, excluding the *batterie de cuisine*. The best execution I ever heard was from an orchestra of these dimensions. But you will see that monstrosity in art will characterize the coming age."

* * * * * *

The exorbitant buildings to be devoted to music and the drama, now either in process of erection or under advisement, in Chicago and in Madison Square and Seventh Avenue, New York, are, by the description we hear of their proposed large capacities, liable to disappoint the hopes of their projectors. Let us parade a few poor and perhaps sordid facts concerning buildings for this purpose, which, after all, must eventually arrive at the fundamental question—will they be self-supporting? will they pay?

I have frequently heard the management of a theatre complain that it was too large. I have never heard a manager complain that his house was too small.

A large theatre requires for the production of the same work a greater number of musicians in the orchestra; a greater consumption of gas; a greater number of attendants; a larger number of supernumeraries and ballet; a larger staff of carpenters, property-men, and gas-men; a larger amount of canvas and wood for the larger scenery; a larger quantity of furniture on the stage.

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There is an increment in every department. It is, therefore, much more costly to carry on than a smaller theatre. The same entertainment does not look so well on the large stage, unless it be a spectacular play, and the public do not patronize a performancein proportion to the size of the theatre in which it is given.

The popular places of public entertainment have always been medium-sized or small.

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The stature of the actor should determine the size of the stage on which he appears, and the distance at which his features can be perfectly seen may determine the proportions of the auditorium. The measure of the spectator's eye may be taken as a standard for his ear, for within that scope the actor will be heard: the two senses are, so far as a theatre is concerned, of equal capacity.

I now approach another matter, which many may say is not a matter of fact; and I am diffident in making the statement because it seems to conflict with a principle laid down by Huxley, who says: "It is wrong for a man to say he is certain of the truth of any proposition unless he can produce evidence which logically justifies that certainty." Yet I am certain that some artists possess a power over a multitude which cannot be logically accounted for; that I have again and again witnessed a phenomenon, and have myself exercised a power, of which I am sensible, but of which I can render no explanation. When a public speaker or an actor approaches his public, his mind reaches forth to collect them; his art is to deprive them of their separate individualities, and fuse all listening minds into one—to make all hearts beat as one; and, as he leads them to beat, to bring them irresistibly into one current of sympathy. Those who have dealt with masses of minds under such conditions will remember the indecision and fluctuation that precede the moment when, not gradually, but suddenly, the crowd becomes unified by a kind of electric shock. The actor, feeling the effect, murmurs to himself the old stage expression, "I have got them!" He feels the instant, not by any sound emitted or any indication audible or visible; but by some sympathetic chord, which becomes taut and vibrates. I, sitting as a spectator, perhaps as author of the play, and watching for this well-known and expected phenomenon, feel the shock and know its meaning. Passing, as my vagabond life has led me, from

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London to New York, over the United States, to Australia, visiting a hundred different cities and practising on many different audiences, I have been able to compare results, and find that, when an audience exceeds a certain size, it is very difficult to establish in it perfectly this fusion of minds. I may succeed with the lower regions and fail to bring the upper into the swim. I feel there is a limit where my efforts prove unable to keep the whole a unit. I might ascribe this failure to my own deficiency of power, but I have remarked the same failure under similar circumstances, when great artists were using their grandest efforts.

Wherefore I am led to believe that a group of more than two thousand persons is not so susceptible to the psychic influences exerted by artists as a group of less than that number. There is a limit to the genius of the actor as regards its reach over his audience; and no auditorium should exceed in size that limit.

If one were not afraid of overloading your readers with theatrical phenomena for which we fail to account, I would ask how, in a city of over two millions of inhabitants like New York, or of five millions like London, when a popular play is running, does the public so measure the capacity of a theatre that, if it holds fifteen hundred people, that number exactly, or within a hundred or so, present themselves nightly for admission; but if it be the Madison-Square Garden, with Barnum's exhibition, holding ten thousand, that number will present themselves? The same holds good in London and in Paris.

DION BOUCICAULT.

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A STORM-CENTRE IN THEOLOGY.

BY THE REV. NEWMAN SMYTH, D.D.

THE American Board of Commissioners for Foreign Missions is a close corporation which was organized in the year 1810 for the immediate purpose of sending certain young men as missionaries to the heathen. Its administration is entrusted to several general secretaries, who act under the advice of a Prudential Committee. Practically, though not formally, the secretaries have chosen fit persons to serve on the Prudential Committee, the committee, with the secretaries, have nominated proper members of the corporation, and the corporate members have periodically reëlected the secretaries and committee. For years nothing happened to disturb this safe and amicable understanding. And the board, under this method of management, has achieved an honorable record of missionary success.

Recently, however, the American Board has become a storm-centre of theological controversy; and besides the special interest which naturally accompanies the reports of a great missionary enterprise, its next annual meeting, which is to be held in New York in October, will attract the attention generally of observers of the conditions and progress of religious thought in this country. It is necessary to review the course of events which have invested a foreign missionary society with this unusual interest, in order that the recent controversy in the American Board may be made intelligible to the general reader, and that the principles and position of the so-called liberal or progressive body of men among its Congregational constituency may be fairly understood.

During the earlier years of its history many theological storms swept over New England, but the American Board was happily kept clear from them all. Its original intention, to which during the best years of its history it has been held steadfast, cannot

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be better described than in these words, which one of its former secretaries used in explaining the constitution of the board: "How entirely aloof has it stood from party, belonging to none, claimed by none, employed by none! It makes no appeal to sectarian or party feelings." In 1871 the board distinctly declared that it was not to be regarded as a theological court. But at the annual meeting which was held in Portland in 1882 the clear missionary voice of the board seemed to be disturbed by an undertone of theological anxiety. Its best friends, however, hoped that this was but a discordant echo which had been borne into its proper discussions from outside, and they would not believe that any serious intention could be cherished of using a foreign missionary society for purposes of domestic theological correction. None were more astonished than the liberal men within the denomination from which the board mainly derives its support when, a few years later, they learned that the Prudential Committee had begun to use their authority for purposes of theological discrimination. The liberal leaders, apprehending the disaster which might befall the board, should it allow itself to be dragged into a pending theological discussion, succeeded in keeping from the newspapers for several months the complaints which had come to their knowledge of the rejection, for supposed theological reasons, of an estimable lady teacher by the officers of the board. Further cases of proscription, however, followed, and when all other private means of preventing what seemed to be the outbreak of a needless controversy had failed, it is a matter of unwritten history that as a last resort, at the solicitation of liberal men, the venerable Dr. Mark Hopkins, then president of the American Board, visited Boston and threw the whole weight of his influence on the side of conciliation and practical Christian comprehension. His effort proved of no avail; the Prudential Committee persisted in the policy of theological proscription which they had conscientiously adopted, and the open and memorable debate at Des Moines became the inevitable consequence.

The position which President Hopkins took upon that day has been ever since the main position of the liberal minority in the board. He maintained that "the Prudential Committee is not a theological committee," and that the board should not be used "as a make-weight in a theological controversy." The liberals declined then, as they have always refused, to advocate on

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the platform of the board the particular doctrinal opinions which they are supposed to hold; but they pleaded for a policy of non-interference, and of practical comprehension to be restricted only by the limits of fellowship within the constituency of the board.

The controversy thus begun became intensified during the following year, attracting wide notice on account of what was known as the case of Mr. Hume. That able and successful missionary of the board had been arraigned by the Prudential Committee for some remarks which he had made in an after-dinner speech at Andover; the place where he was bold enough to speak, as well as the few words which he uttered, having much to do with the offence which was taken in the rooms of the board. The whole history of the trials and tribulations through which that devoted Christian man was at length suffered to go on his way by his brethren has never been written: those personally conversant with the facts might relate how he was called upon to make statement after statement of his theological position; how, when the committee seemed unable to understand his repeated explanations of his views and he had asked for an ecclesiastical council to inquire into his orthodoxy, that request was ignored, while still further examinations, oral and written, were instituted by different officers of the board; and how at last, under a rising storm of public indignation, this Christian man was grudgingly permitted to carry the water of life to the heathen;—all this tribulation, to those familiar with the whole trial of Mr. Hume, forming one of the most surprising instances of the survival of mediævalism in the nineteenth century. I do not imagine that it would have taken the Apostle Paul five minutes to decide whether a man like Mr. Hume should be suffered to preach the Gospel among the Gentiles; and even the conservative St. James would have required of him no further promise than Mr. Hume's whole career showed that he was peculiarly fitted to give,—no greater burden than such things as may seem necessary for peace. To the general student of religious history this treatment of Mr. Hume in the rooms of the Prudential Committee furnishes interesting material for the better understanding of the psychology of the Inquisition.

The controversy in the American Board, thus inaugurated and intensified, reached a climax at its meeting in 1887 in Springfield. In the action which was then taken by the board there was no

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ambiguity. The progressives have since accepted it as a distinct announcement and authorization of the policy of proscription and exclusion which had been asserted by the Home Secretary. Men representing almost every important educational interest in New England, men who had long been recognized as sound and able leaders of their denomination, men, too, who spoke for churches that make the largest contributions to the treasury of the board, urged the opposite policy of comprehension, and protested against the assumption of theological authority by the Prudential Committee; but they were outvoted, and their plea for toleration signally failed. The Rev. Dr. Storrs, who had been placed in a somewhat embarrassing position by the partisanship which had taken cover under his wide reputation, after much hesitancy accepted the presidency of the board to which he had been elected by the majority, and wrote a letter of acceptance which was doubtless intended to be conciliatory. The liberals did not desire to embarrass any effort at conciliation which Dr. Storrs might make, and accordingly they have waited to see what fruit, if any, his influence might bear, although they have not been blind to the fact that Dr. Storrs's letter, at best, offered only an attempt to find a point of ecclesiastical equilibrium somewhere midway upon a sliding theological scale, and was not an effort to settle a disturbing question upon some fixed and permanent principle. But wishing to allow ample time for the majority to effect any possible alleviation of the situation, the progressives generally absented themselves from the next annual meeting at Cleveland, and made no motion to confuse the responsibility for the policy of the board which rested upon the majority. With the exception of the inauguration of a movement looking towards a future reorganization of the board on a more representative basis, nothing, however, of importance was attempted by the party of the majority at Cleveland.

One other and an important fact belongs to this chapter of ecclesiastical history. Subsequently to the last meeting of the board the Berkeley Temple, a Congregational church in Boston, by the advice of a council, took action to send, independently of the board if necessary, one of its members, to whom a missionary commission had already been refused by the Prudential Committee. Having been a second time rejected by that committee, he has been sent by his church to Japan, where he is now working in cordial coöperation with the missionaries of the board.

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Such in brief has been the course of the recent controversy in the American Board.

If in this rapid review of it I have not yet mentioned the theological question which has been made prominent in the discussion, it is because from the first it has seemed to me to be the accidental point of collision between different tempers of mind and tendencies of thought, and not the real and essential principle at issue, so far, at least, as pertains to the conduct of a missionary society. Storm-centres of theological discussion are constantly shifting; providentially the area of low pressure does not always remain over the same region of thought. Had a minute examination, like that to which candidates have been subjected by the secretaries touching their hope for the future life, been instituted with regard to their views on the nature of the sources and documents contained in our sacred Scriptures, the point of theological stress and difficulty might have been changed. But whatever may be now or another day the particular doctrine which the progress of thought may summon for reëxamination in the minds of men, the contention of the liberals is that the practical work of the church should not be made to rise or fall with the theological barometer, but should be kept broadly and generously true to the main Christian purpose and life of the churches.

At its meeting in October the board will have before it some results, already becoming evident, of the policy of exclusion which has now been in practical operation for three years.

It appears that the conciliatory letter of Dr. Storrs has had little appreciable effect in changing the conduct of the Prudential Committee. The door does not yet seem to stand much farther ajar, or to swing open more easily to missionary candidates who are suspected of adding too much knowledge of German or recent English theology to their graces of piety. At least, some recent correspondence with reference to the possible appointment of such persons has not proved sufficiently encouraging to warrant its continuance. Practically three theological seminaries, supported by the Congregationalists, are shut out from participation in its board of foreign missions. Individuals from these seminaries may slip in, but, as a class, those who are educated in them, who receive their best spirit, must look elsewhere than to the American Board for terms of honorable Christian service. Young men

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who may venture to admit into their thinking any larger hope for multitudes of men than consistent Calvinism or "the faith once delivered to the saints" of the seventeenth century can allow, may find plainly written for their warning over the door to the Home Secretary's office the words which Dante saw when he approached the gate of the Inferno—"Abandon hope, all ye who enter here." The secretaries, indeed, continue to invite these young men to come; but they are naturally reluctant to accept the bonds held up for them to put upon their reasons, and from which, as pastors of our churches, they would find themselves free. The present theological committee of the board have sought to meet this emergency, which their policy has created, by looking for more docile, not to say more learned, men in Canada!

Another natural result of this policy of proscription which is already becoming obvious to those in a position to observe it, and which will become more painfully evident the longer the present policy is persisted in, is the deterioration of the missionary service. The strongest, most independent young men cannot for a period of years be turned aside without serious loss to the future efficiency of our missions. President Hopkins, with a flash of sagacious wit, once remarked that there was danger that the American Board would become "an old men's society." If that prophecy is not to hasten to disastrous fulfilment, obviously the board must be administered by officers in touch with the life now stirring among men, and who can understand, without numberless examinations, what is going on in the minds of young men.

The gradual effect upon the finances of the board of a persistent policy of exclusion presents another problem which may profitably receive consideration at its next meeting. The financial honor of the American Board has never been impeached. Not a dollar contributed to it has been lost by those to whom its funds have been intrusted. They justly deserve the continued confidence of the churches. Nevertheless, its present financial condition is a matter for serious consideration. Had it not been for a liberal use of two large legacies, one of which is supposed to be used for the development of new missions, and the other of which, by vote of the board, was "set apart to meet special calls," an unfortunate gap would ere this have become apparent between the ordinary receipts and the needed appropriations of the board. The published reports of the treasurer do not disclose the exact

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extent of this difference between the annual receipts and the amounts required to keep missions up to existing standards of efficiency. Only an itemized account of the alleged "special calls" for which large drafts have been made during the past five years upon these legacies, can reveal the exact financial condition of the board. I doubt if the Home Secretary would admit in the exegesis of his favorite Biblical texts the liberal principles of linguistic interpretation which are suggested by an attempt to discover for what "special calls" so large a draft as $154,000 was made in one year upon the Swett legacy of the board. We would not be misunderstood as questioning the judiciousness of that expenditure; doubtless the exigencies of the service called for it; but we would suggest that, in order that the exact financial condition and prospects of the board may be fully disclosed, an itemized account of these drafts for the past few years should be forthcoming.

Thus far the progressives have loyally continued their contributions for the support of existing missions; but the responsibility for the effect upon the finances of the board of a policy of exclusion rests upon the majority. While the theological party now administering the American Board are occupied in the somewhat unfortunate attempt to exclude from it those whom they regard as heretics, they should not suffer the board to slip blindly too near the edge of a financial precipice. We, on our part, do not disguise our fear that a prolonged policy of proscription and division will naturally result in financial, as well as moral and intellectual, loss to the board and its missions.

The effect of this division policy upon the efficiency of our missionaries in the field is another result of it already coming within the range of prediction. Were the action which was taken at Springfield consistently pressed, it would involve the recall of some of our ablest misionaries. It would mean also the offer to the heathen of the theology of a portion of the board, or the dogma of a secretary of the board, as the condition of Christian communion. "Japan," said an intelligent Japanese student, "does not want your New England theology; it does need your American Christianity." The problem still before the American Board might be reduced to that simple statement of it: what will you decree to send to India or Japan—a stone from your dogmatic quarry or the bread of life? a provincial theology or a catholic Christianity?

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The remonstrants, or protestants, within the American Board are not a party bound by any special theological covenant. The particular doctrinal point which in recent discussions has been much debated is the hope entertained by some among them that somewhere, and somehow, there shall be found one gracious opportunity, there shall be afforded by the God who is no respecter of persons one Christian probation, for all men. It does not seem to those who harbor this hope to be a very revolutionary, or unreasonable, or unscriptural view; but by none of them is it put in the first line of the simple and grand Christian affirmations. It belongs, with all similar answers to moral difficulties in Christian doctrine, to the second or third line of the inferences which may be suggested by the Scriptures, or the hopes love may conceive of amid the troubled visions of faith. The progressives, as for want of a common name they may for convenience be designated, are by no means agreed in their theological thinking. They dwell in the same ancestral home in the unity of the Spirit; but they throw open different windows of outlook towards the far horizons of God's purpose. They are agreed in their reverence and love for their common Christian hearth, and also they act together in opposing the locking any doors by which knowledge from far or near may enter, or the darkening of any windows through which speculative thought may gain vision of realities beyond knowledge. They are not contending within the American Board for any private opinion which may be entertained among them; but they would keep room in their churches for a fearless faith, and in the work of their denomination they would pursue a policy of enlightened charity. They deem it far wiser and safer to trust young men with Christianity, and to trust Christianity to such young men as have been refused commissions by the board, than to put them in bonds to the somewhat modern theological traditions which the Home Secretary has commended to the faithful in his recent revised and emended edition of the Apostles' Creed.

From the outset, the protestants in the American Board have refused to be driven into a schismatic position. Theirs, too, are the fathers, and they mean, so far as lieth in them, to live peaceably with their brethren. Thus far they have had little difficulty in doing so outside the American Board. Ecclesiastical councils, east and west, with unbroken unanimity, have declared for toleration and practical comprehension within the denomination.

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Only within the close corporation of the American Board has schism been invited. Into that sin of schism the liberals do not propose to be driven. They are bound by their whole spirit not to be schismatic; they are also compelled by the positive force of their faiths not to rest content with a merely negative position in any evangelical or Christian work. The key to their solution of their double obligation of fidelity to the American Board and of faithfulness also to the cause of missions, is found in the action, already narrated, by which, with the advice of a Congregational council, an independent missionary has been sent by a particular church to coöperate with missionaries appointed by the board. Whether other churches may have occasion to send still other men in a similar independent but friendly way will depend largely upon what the majority at the next meeting of the board may judge to be their responsibility for the still unrepealed, and as yet officially unmodified, policy of proscription adopted at Springfield.

It is not for us to foresee whether the conservative reaction from that extreme position, many signs of which have appeared, will make itself sufficiently felt to effect any practical alleviation of the situation at the October meeting. We do not venture to predict whether any benign influence may then arrest a course of administration whose deteriorating and disintegrating effects upon a great cause are already too plainly evident. It is not easy always to open the eyes even of good men that they may see what is going on around them. But so long as the action which was taken at Springfield remains unmodified or unrepealed, unofficial or private mollifications of it, though well meant, do not clearly relieve the situation. If any helpful action is taken by the board in New York, it is to be hoped that it may be explicit. Whether at that time the minority may choose to wait still longer in quietness, or to renew their protest and their plea for toleration, time and circumstances will determine. But whatever may be done, or left undone, at the coming meeting in New York, the protestant minority, the party of comprehension, within the American Board may confidently wait and work, deprecating indeed the temporary loss to Christian missions which results from a policy of proscription, but believing that in time Christian charity and common-sense will settle generously and happily this whole needless and wasteful controversy.

NEWMAN SMYTH.

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AN ENGLISH VIEW OF THE CIVIL WAR.

V.

BY GENERAL VISCOUNT WOLSELEY, K.P., ADJUTANT-GENERAL OF THE BRITISH ARMY.

IN MY last article I dealt with the operations in the East, which are described in the third volume of *The Century's* papers on the Civil War. With a few further remarks on that subject, I shall pass on to consider the story of the campaigns in the West, which are also placed before the public in that volume.

The silence which was necessarily imposed upon General Burnside by loyalty to the Federal authorities has been, fortunately for us, broken through by Major Mason's highly irregular, but very interesting, personal invasion of General Burnside's headquarters. Very dramatic, certainly, is the scene described (page 101) where the Federal commander, after his terrible defeat, sitting "on an old log and being provided with crackers, cheese, sardines, and a bottle of brandy (all luxuries to a Confederate), discussed this lunch, as well as the situation," with the Confederate officer who had surreptitiously secured the interview with him.

It is very characteristic of that kind of West Point comradeship which was never wholly lost among the men who, on the two sides, were doing their best to kill one another, that Burnside should have been anxious to let the able soldiers opposed to him know, what he could not tell his own army, "that he was not responsible for the attack on Fredericksburg in the manner in which it was made, as he was himself under orders and was not much more than a figure-head."

Who, then, was responsible for this and for similiar incidents? There exist in all professions certain men who make their way in the world by pandering to popular prejudices. In the army and the navy the form which this particular quality takes is one which is common in all countries, but in England and America it has

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a special character of its own. During peace, the business of these men is to find excellent military reasons for the penny-wise economies which suit the taste of ministers who want to present a favorable budget to their countrymen. During war, their business is to clothe in military phraseology, and perhaps in army orders, the current popular prejudices of the time. Now, there is no wish to judge here of General Halleck's private character, or to say that, as a public servant, he may not have possessed many high qualities. But, taking the history of these campaigns from the time when he was appointed to the general command of the armies of the United States till the moment when, on "the coming of Grant," he was reduced to the position of a highly useful subordinate, I cannot trace the least evidence of his having ever given a decision which represented more than the embodied prejudices of the moment. There was a popular feeling that the mighty Army of the Potomac ought to brush from its path and easily destroy its numerically-inferior opponent; therefore the one thing said to be wanted was that it should go straight at its enemy and attack that enemy wherever found. Hence the orders from Washington for the disastrous attack on Fredericksburg, and hence the fatal persistence in that attack after all chance of surprising Lee, or of taking him at a disadvantage, had utterly disappeared.

When Lee began to move to his left after Chancellorsville, he offered General Hooker an obvious opportunity to overwhelm his right, which was still at Fredericksburg, and to threaten Richmond, long before any possible danger could have arisen to Washington with its powerful defences. But Lee was able to count with confidence upon the fears of a capital city and of the government within it for their own safety. The event proved that he was right. The mere suggestion by Hooker that to attack Lee's right was the proper course to pursue was sufficient to cause the removal of that general from his command. After Gettysburg, the popular impression appears to have been that the Confederate Army had been routed and that the Federal Army was virtually intact. The true state of the case was that the Confederate Army had certainly suffered very severely. It had been repulsed and defeated, but it was in no sense disorganized, and the Federal Army was in no condition for an effective general advance.

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According to the evidence supplied by this volume, General Meade, at Gettysburg, appears to have done all that any one but a man of quite transcendent military genius could have done to organize an effective pursuit. Few soldiers can, therefore, read without some angry feeling the letter which Halleck then sent to Meade.

'I need hardly say to you that the escape of Lee's army without another battle has created great dissatisfaction in the mind of the President, and it will require an active and energetic pursuit on your part to remove the impression that it has not been sufficiently active heretofore."

That feeling must necessarily be increased by his further missive in answer to Meade's natural and immediate reply, asking to be relieved from the command of the army. "My telegram stating the disappointment of the President at the escape of Lee's army was not intended as a censure, but as a stimulus to an active pursuit." Clearly General Halleck was in his wrong place. If, after Meade had won for the Federals the first great victory of the war over Lee's army, it was advisable then and there to remove him, the first letter would have been a fitting preparatory step to that end. Otherwise, to say that it was not a censure, and yet send it, was an act of feebleness, and displayed great ignorance of how a general commanding an army in the field should be dealt with. What pursuit had Halleck carried out after Shiloh? Of all men in the war, Halleck was the last who ought to have reproached another man for not adequately reaping the fruits of victory. Jackson's principle is always sound—never to "let up in pursuit" while pursuit is possible. But pursuit must have been begun in order to be followed up. An attack on the Confederates on the 4th July, if it had been possible for the Federal Army, would probably have been disastrous to the Confederates, because of their want of ammunition. No one who was not then present in the Federal Army can judge if it was possible. No one who was present at Gettysburg seems to have considered that it could be made. Under those circumstances, Halleck's business, as the chief military adviser of the government, was clearly to have pointed out to the President, "It is impossible to judge without being on the spot whether it would have been possible to do more than Meade has done; but as long as we retain him in command we must give him every sign of our confidence and all encouragement." It would have been easy so to word an earnest belief in his future success as to suggest an eager pursuit.

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It is not proposed to enter closely into what is called the "Meade-Sickles controversy." There are evidently exaggerations on both sides. General Meade, having only just succeeded to the command of the army before the battle of Gettysburg, was in a very difficult position. He seems to have used considerable judgment in the mode in which he brought up his reserves to the right place and at the right time. If he was unjust, as he is charged with being, in his report of the share of the different corps in the action, he only failed in what is an almost impossible task. No general can know for long after a battle all the details of what has happened in it. On the other hand, "councils of war" are recorded under Meade and other generals in this war as though they were the most natural and legitimate things in the world. It is difficult to conceive the circumstances under which such councils as are here described, and by means of which the general in command would seem to endeavor to transfer his own responsibility to the shoulders of the majority of the council's members, can be other than a blunder and a sign of weakness. Newspaper reports of wars have, I think, often tended to create very unfortunate popular impressions as to the frequency of these councils in all campaigns, which may even affect soldiers. Whenever a number of generals are known to be assembled at headquarters, those in search of news naturally jump to the conclusion that some event is about to take place, and announce to their readers that a "council of war" is being held. Nine times out of ten the generals have only been assembled to give such information as they possess, to state their views, and to receive their orders. The character of such a proceeding is altogether changed when it is announced as a deliberative "council of war"—the abomination of all strong men, a byword for inefficiency and want of decision, and for weakness of action in all military matters. The decision of Meade's "council of war" on the second day at Gettysburg, like that arrived at by most councils of war, was not to attack, and, therefore, as it fortunately proved, to remain where they were and accept battle. This decision cannot be taken as a model for future imitation, though it happened in this instance to be the right course, as it turned out.

On one point more there is a word to be said before we pass from the East to the West. The evidence appears to be clear that on the

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afternoon of the first day of Gettysburg, at 4 o'clock, General Ewell had his corps, 20,000 strong, ready in column of attack to assault Culp's Hill. (Page 411.) The evidence is equally clear that, in all human probability, if that attack had then been delivered, it would have been successful, and that, if successful, the whole of Cemetery Ridge would have become untenable. Further, it is clear that Lee stopped that attack against Ewell's judgment. As the case arose, and as the facts were, there can be no question that this was an unfortunate decision. Lee was aware of the advance of Slocum's corps to the support of the Federals, and knew that his own army was not yet concentrated, but that, in all probability, it would be concentrated more effectively than the Federals could be by the following morning. This was the evidence before him at the time, and the reasoning to be inferred from it, under all the circumstances of the case, leads one to think that he was justified in postponing the attack as he did. If Lee had then known what we now know, it may be assumed that he would have attacked; but had we been in his position then, it is tolerably certain that most generals would have done as he did. It is not by the knowledge we now have of all the circumstances that such a decision as that of Lee must be judged, but by the knowledge of the facts which he himself then possessed. That this knowledge was not more accurate was, no doubt, due to the previous absence of Stuart and his cavalry. It was the only campaign of the war in which Lee fought blindfold, and he bitterly paid the penalty for so fighting. It would be rather interesting to know whether disappointment at losing the precious opportunity did or did not, during the following days, somewhat affect the vigor of Ewell's coöperation. Something of the usual energy of the Confederates seems to have been missing on that side, and though it may be attributed chiefly to the delay and the uncertainty of the hour of Longstreet's attack, other causes probably contributed, and this disappointment on Ewell's part was most likely among them.

There seems to be this general peculiarity about these campaigns in the West—that they were fought very much to secure recruiting districts. Where the condition of feeling was such that it made all the difference whether the district was in the occupation of the Federal or the Confederate troops, and whether the

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State authorities were in sympathy with Washington or Richmond, it is obvious that the conditions are very unlike those which usually obtain in European warfare. The only very analogous wars to which one can go back for similar conditions in this respect are those of Wallenstein and Gustavus Adolphus. Gustavus, when he died, left to his successor several armies, though he had entered Germany with but one. It made all the difference that he had been able to clear the Protestant districts of the Imperial troops, and to establish recruiting depots there. It is obvious that the wisdom of military movements, and the relative importance of certain campaigns, cannot, under these circumstances, be judged on precisely the same principles on which one would judge contests between the different nations in Europe.

If the statements as to the condition of popular sentiment in California and in the West during the earlier years of the war, which are furnished us in some of these papers, are to be relied upon, it is evident that the so-called New Mexican campaign was a much more important matter, small as were the forces engaged in it, than it has been supposed to be. As General Grant has said, the Confederacy, without large territories to extend into, was doomed, even if it succeeded in establishing its independence. It looks as if, but for the judicious arrangements made by the Federal commander, the Confederate forces, after their successes at San Augustine Springs and Valverde, might have formed an imposing army in New Mexico and Texas. Such an army, if properly supported from Richmond, might have enabled the various Confederate sympathizers to make head in California, and to secure the all-important Pacific Coast, with its important gold supply. It is scarcely possible to overrate the difference which that would have made in the conditions of the war. Probably the Confederacy, cut off as it was from all the outside world by the original mistakes of Mr. Davis's administration, could not have afforded to furnish supplies for this New Mexico campaign. But considering the initial success which attended it, and that it failed almost entirely from lack of material resources, one is led to think it would have been worth a more serious effort.

The junction of Van Dorn and Price with General Beauregard's forces, after the battle of Shiloh and the retreat from Corinth, seems to show clearly how easy would have been that junction in the mode suggested in my first article, prior to the

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Pea Ridge campaign and the battle of Shiloh. Then it would, in all probability, have been decisive as far as the battle of Shiloh itself was concerned, and at least for the year it would have left the whole West in the hands of the Confederacy. Considering the state of feeling prevailing at that time, it is impossible to gauge what might not have been the effect in the creation of new Southern forces. The retreat from Corinth seems to have been an extremely skilfully-contrived movement on the part of General Beauregard. General Halleck appears to have done about as little as it was possible for a man to do with the imposing forces and the able soldiers, Grant, Sherman, and Sheridan, who were with him. The regathering of the Confederate forces at Tupelo, and the scattering of the great Union Army, are among the most curious incidents of the war. General Beauregard had done great things for the army under his command during the halt at Corinth and Tupelo. Under his fostering care it had vastly improved both in discipline and in military training. It was a Confederate misfortune when ill-health obliged him to leave and hand over command to General Bragg. The whole of Bragg's ill-advised invasion of Kentucky and the simultaneous movements which led to the battles of Iuka and Corinth, in September and October, 1862, can, it seems, be only justly judged by taking into account the question of the recruiting districts. Bragg's advance into Kentucky was a mere flash in the pan, not because of any strategical or tactical considerations, in the ordinary sense of the term, but because Kentucky did not rise in support of the Confederate cause. Whatever may have been the reason,—whether the actual amount of anti-Union feeling in the State had been exaggerated, or because, as Bragg thought, the blue-grass region was too rich to allow men readily to sacrifice their wealth and ease for any cause,—the fact remains that Bragg's invasion was undertaken to gain recruiting districts; that is, in other words, to afford the people of Kentucky the chance of rising in support of Southern independence. The attempt was a failure; the people did not enlist even in sufficient numbers to make up the waste which the campaign itself entailed. It is, therefore, difficult to see how any change in the handling of troops could have made much difference in the final result. "The people have too many fat cattle and are too well off to fight," was General Bragg's commentary upon the conduct of the Kentuckians.

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Van Dorn's movement on Corinth to make a direct attack upon it, instead of manœuvring Rosecrans out of it, was a mistake that seems obvious on the face of the facts. When Bragg had been intrusted with the chief command in the district, it was an enormous blunder on the part of the Confederate Government to place Price's forces under the command of Van Dorn. This arrangement, made without notice, suddenly deprived Bragg of the support upon which he had counted; that is clear enough. It distinctly violated the principle so well expressed afterwards by President Lincoln, that it is not wise "to swap horses whilst you are crossing a stream." As far as one can now judge of the relations of time and place, there was not time, it would seem, for Price to have moved with considerable effect upon Nashville, as Bragg had ordered him to do. At all events, his long circuitous movement to join Van Dorn was a waste of force, even apart from the disastrous termination of that movement in the battle of Corinth (October 4, 1862). Buell's army was exposed to very serious risk in the movement from Nashville upon Louisville, and that risk would have been greatly increased if Price had moved as rapidly as possible upon Nashville. General Bragg was a commander who seems to have been very uncertain in his action. At times he was both skilful in his arrangements and enterprising in his movements. Suddenly his skill deserted him at the most critical moments. During his bold but useless invasion of Kentucky, he was, no doubt, right in considering that everything depended on a proper coöperation between him and General Kirby Smith. No doubt the authorities at Richmond were largely to blame for not definitely appointing one man to command the joint expedition from the moment the invasion of Kentucky had been determined upon. Nevertheless, from the evidence before us, it seems clear that Bragg was supplied with sufficient information as to Buell's move to have enabled him to fall upon Buell's flank during his march from Nashville to Louisville.

The decisive effect of such a move was so obvious that Bragg would clearly have been able to call upon General Smith to support him, and the junction of the two forces ought to have been made by Smith's junction with Bragg rather than by Bragg joining Smith. It is difficult to see how, if Bragg, supported as rapidly as possible by Smith, had fallen upon Buell during the march,—still more, if simultaneously, as Bragg wished, Price had

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moved upon Nashville, instead of moving round to join Van Dorn at Corinth,—Nashville or Louisville could have escaped falling into the hands of the Confederate generals. Probably in that case they would have been able to strike back in time to intercept the retreat of the Union force from Cumberland Gap. If, as the Confederate writers seem to believe, the effect of so great a success would have been to induce Kentucky to throw itself heartily into the cause of the South, the result would have been most important. Without that, it is obvious that just as Lee's invasion of Pennsylvania caused numbers of the local militia to come to the aid of the Union forces, so the approach of Bragg's army to the borders of Ohio and Indiana tended to raise fresh armies against him. No doubt much of the relative ill-success, in proportion to numbers, which subsequently attended Buell's movement may be attributed to the rawness of that general's troops, who were little better than mere recruits, whilst Bragg's men had been trained to war in several campaigns. In the action of Perryville (October 8, 1862), which followed upon Buell's gradual concentration of force at Louisville, and the consequent retreat of Bragg, Buell evidently succeeded in imposing upon Bragg as to the direction in which he intended to move. Bragg's success in the fight and his successful retreat afterwards appear to have been very much the result of his possessing an army much better in hand and more experienced in fighting than it was possible for Buell to have collected under the circumstances at the time.

Though not prepared to modify the opinion expressed elsewhere, that General Lee was the most remarkable man the Civil War produced, and though I cannot admit that General Grant possessed at all the same genius for command, yet it must be at once confessed that it is an immense relief to turn from the mirage of these indecisive battles and movements in the West to the story of the Vicksburg campaign. It is very natural that General Sherman should rate very highly the military genius of General Grant, for the great services which, in the summer of 1863, Grant rendered to the Union made him tower head and shoulders over all others who could possibly be placed in supreme command of the Federal armies. McClellan had become by this time a political character, and as long as Mr. Lincoln remained President it was impossible that he should be again appointed Commander-in-Chief. The elections had already begun to show

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the effect which the depression caused by Fredericksburg and Chancellorsville was producing throughout the North. Halleck, applying to a campaign which he could not stop till its success was assured the mischievous interference which had been in the East so fruitful in disaster, at last palpably stultified himself, even in the eyes of the President and the Cabinet. The scheme of the Vicksburg campaign was both original and brilliant in conception, and vigorous and fortunate in execution. Sherman, loyally anxious to acknowledge his own opposition to it, contributed, no doubt, largely to cause the military skill which Grant had shown to be appreciated throughout the country.

In its general character of sudden movement, by which he enlisted on the side of his army the advantages of surprise by a concentrated force, unentangled by any line of supplies, the Vicksburg campaign closely resembles many of Jackson's operations. It had something of the character of his campaign in the Shenandoah Valley, and something that recalled his movements which preceded the second Bull Run. The news of such strokes as Grant delivered in rapid succession at Port Gibson, South Fork, Fourteen-Mile Creek, Raymond, Jackson, Champion's Hill, and Big Black River, coming at a moment when gold had gone up to a figure hitherto unknown, and in the very weeks which immediately succeeded Chancellorsville and preceded Lee's invasion of Pennsylvania, must, indeed, have seemed like a sudden break of light through the darkest of clouds. No wonder, therefore, that public attention became concentrated on the siege of Vicksburg. The very fact that six weeks elapsed before the surrender was probably in favor of Grant's reputation. It gave time for representative people from the North to gather in the besieger's lines, and hear from the victorious army all the particulars about the successful campaign, and to learn how entirely it depended for its conception and execution upon the skill of one man, and upon the confidence which he had inspired in his subordinates.

When, almost at the same moment, the fall of Vicksburg and the battle of Gettysburg made the 4th of July, 1863, almost a new birthday for the Union, the general self-congratulation of the North made all hearts crave for a hero—for some one in whom to feel confidence. All this tended greatly, and very naturally, to increase the importance of Grant's position. In the West, the work accomplished and the victories achieved were palpably

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Grant's own, but from the first the general public, at least, seem to have refused to Meade the honors of the battle which had been won under his orders. When, in consequence of the defeat at Chickamauga, the virtual investment of Rosecrans's army in Chattanooga, and the unhappy condition of Burnside's army at Knoxville, the aspect of affairs in the West again became gloomy and threatening, it followed as a matter of course that General Grant should be intrusted with the task of restoring the Union affairs in the West.

General Bragg seems to have shown, in the campaigns which had intervened since his retreat from Kentucky, a strange mixture of qualities. At the battle of Stone's River he successfully planned and carried out an attack upon the right flank of Rosecrans's army. But when everything was going in his favor, he abandoned his advantage, and, instead of crushing in the defeated wing upon the other wing, made a gratuitous attack upon the strongest intact position left to the enemy, and at a point where his previous success gave him no advantage. Rosecrans skilfully manœuvred Bragg out of his defensive positions, and forced him back beyond Chattanooga in June and July, 1863. The art of finding out the position, movements, and intentions of the enemy is the A B C of generalship. Of this art General Bragg was not only ignorant, but he lacked even the power to put together into one intelligible whole the information daily supplied by his outposts and obtained from other sources. At Chickamauga the victory was clearly in no way due to Bragg, and his incapacity to realize the nature of the situation presented to him was very much alike at the two battles of Stone's River and Chickamauga. He seems in the first instance to have contrived with considerable skill the virtual investment of Rosecrans in Chattanooga, but it is difficult to understand why, if his force was sufficient to allow him to detach Longstreet at all, he should not have attacked Bridgeport before the arrival of Hooker's troops. To have done so would have deprived the Union troops of their only means of constructing boats within reach of the beleaguered army. Bragg seems to have relapsed into a condition of careless confidence after the important positions round Chattanooga had been, in the first instance, secured. So much so that things were left in a condition which only required that a vigorous leader should restore confidence to the army of the Union to make it certain that

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the besiegers would lose all the results of their previous successes.

So far as one may judge from the papers contributed to this series, those who fought under Grant at Chattanooga are by no means disposed to credit him with any great share in the work of opening the "cracker line," or even in planning the battle itself. I am disposed to think that they hardly do General Grant justice. It may be very true that the apparently splendid effect which, as the broad results only were heard of at a distance, appeared to attend the placing of Grant in command of the army and the dismissal of Rosecrans, was something of a *coup de théâtre*. It may be very true that the arrangements for opening communications had been at least partly planned under Rosecrans before Grant's arrival at Chattanooga, on the 23d October, 1863, and that they were mainly the work of subordinates. It may be true that, in the actual moment of victory at that place, the successful charge of Thomas was due to the spontaneous enthusiasm of the men, and that it was actually carried out in excess of Grant's intention or order. If it be assumed that Grant trusted entirely for his success to Sherman's attack upon the Confederate right, or trusted for success even to the combined effect of Sherman's and of Hooker's movement, it is no doubt true that Grant's original plan was not carried out. Grant certainly made many changes in his plans of attack, but surely this sort of criticism is not by any means fair to a general commanding an army in battle! The changes of plans seem to have been only such as the changing circumstances rendered necessary. General Grant acknowledges that Rosecrans offered him many most valuable suggestions, and rather pithily says: "My only surprise was that he had not carried them out." This may or may not be quite fair to Rosecrans, and it may be the case that the arrangements were being worked out as rapidly as circumstances admitted before Grant's arrival. But, taking the whole of the facts as they stand, it seems clear that while Grant, as any sensible man in his case would have done, took advantage of whatever had been effected before his arrival that promised to be useful, and listened to all suggestions that were likely to assist in the solution of a very difficult problem, nevertheless it was his energy and skill which carried the whole of the scheme through the great victory of Chattanooga. No doubt, as continually occurs in war, things did not happen exactly in the way he had designed they should

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happen, but he was ready to do the best thing that was to be done under all the fresh circumstances as they arose. The actual working-out, the general superintendence of the whole scheme, were his and his alone.

The panic which appears at the last in that battle to have seized upon a portion of the Confederate Army was not, I think, the improbable event General Bragg seems to have considered it. Nothing tells so much on the confidence and courage of an army as the conviction that their general has been outmanœuvred by the enemy. Now, his army, it seems, never had any very special confidence in Bragg, and every misfortune is possible to the army that has no confidence in its leader. The battle of Chickamauga, and the knowledge that he had actually absented himself from the field under the belief that the battle was lost, must have greatly diminished their faith in him, even in the moment of victory. Then, after their successful investment of the Union army in Chattanooga, with everything to raise their spirits and depress those of their opponents, there came upon them one blow after another; first, the opening of the "cracker line," which meant, as they well knew, that there was no longer any hope of seeing the Federal Army surrender from want of food and ammunition; then the successive reënforcements of the Federals, the arrival of Hooker and of Sherman, the most unwise withdrawal of Longstreet's force, and of the detachments sent afterwards to reënforce him, just before Grant was ready to attack. Then came the successful ruse and surprise by which Thomas carried the outposts and picket-lines of the besiegers, and took up a threatening position all along the front of their works; then General Hooker, by the successful employment of superior forces against a weak part of the Confederate line, necessitated the withdrawal of their troops from Lookout Mountain; and then came Sherman's successful surprise of their pickets on the right, by means of which he contrived to get his troops across the river without loss, and to establish them, unknown to his enemy, on their right flank.

I think one may well guess what must have been the effect of all these Federal operations upon the minds of the Confederate soldiers. It is quite true that little material advantage was actually gained by Grant by his attack on the Chattanooga position. But each succeeding event tended to depress the spirits of the

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Confederate Army, to shake their confidence in their leaders, whilst, on the other hand, every fresh move of Grant's tended to restore confidence to the Federal troops, and to make them believe they were being skilfully led. There is a sense in which, with armies as with individuals, deep depression, when once relieved, tends to pass rapidly into a condition of high exaltation, all the more effective because of the reaction from the previous opposite feeling. The army under the command of General Thomas, after all the misery and starvation they had courageously endured, seem to have passed through these phases. Nothing could have been better calculated to excite in them an extreme and passionate desire to go through any sacrifice for victory than that they should be kept for some time idly waiting in front of the enemy, whose forward position they had already seized, and compelled to witness the fighting being done for them by the armies that had come to relieve them—by Sherman on their left, and by Hooker on their right.

Those are circumstances under which you may securely trust Anglo-Saxon troops, at least when once released from the leash, to go forward, as those of General Thomas did, with a bound that carries everything before it, and that probably exceeds both your wishes and your orders. The apparently-sudden change in temperament of their opponents seems to have been all that was needed to convert the discouragement of the Southerners into actual flight. Grant certainly deserves all possible credit for having, within the time between his arrival and the battle of Chattanooga, done so much thus to change the condition of the *morale* of his own army, and of that which was opposed to it. He further deserves the credit of having realized how important that change was to him, and how advantage could best be taken of it. The story told in these papers is a fitting introduction to the time when Grant was to be transferred to a yet higher command, and to be pitted against very different opponents from Generals Bragg and Pemberton.

It is rather curious that this third volume on the Civil War should close with an account of Longstreet's first independent command, in which, far from remaining perpetually on the defensive, he committed himself to the particularly bloody attack upon Knoxville, which, ill-prepared and ill-advised, ended in failure.

WOLSELEY.

[TO BE CONTINUED.]

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ERICSSON AND HIS "MONITOR."

BY CHARLES W. MACCORD, SC.D., PROFESSOR OF MECHANICAL DRAWING, STEVENS INSTITUTE OF TECHNOLOGY.
(FORMERLY CHIEF DRAUGHTSMAN FOR CAPTAIN JOHN ERICSSON.)

THE 8th of March twenty-seven years ago has become historic as a day of defeat and gloomy portent, when the sinking of the "Cumberland" and the burning of the "Congress" destroyed at a blow all confidence in the strength of our navy, and spread dismay at the defenceless condition of our seacoast towns.

And by the association of ideas the 8th of March is still more strongly emphasized; it is the black-letter day on the calendar of the present year, for then the busy brain of the world's most illustrious engineer ceased forever from its labors. The events of the earlier time are vividly recalled by the death of Ericsson, whose name will always have something of magic in it; for it was he who enabled us to retrieve that reverse, who lifted the pall of despondency which overshadowed the land, and did more than any other single man to preserve the integrity of the Union. The speediness of the revenge, too, fitly harmonized with his energetic nature; on the very next day, in the very same place, while seeking new victories, the conqueror met defeat; not in a dream, and scarcely by a miracle, could the dramatic effect have been enhanced.

Nor is there upon record a coincidence more striking or more suggestive: in the darkness of the early morning, the great designer set sail upon the unknown sea, on the anniversary of the very day when his little ship had come to anchor in the roadstead, in the darkness of the evening,—a darkness soon to be dispelled by the splendors of a triumph, which for all coming time has fixed his name and hers in golden letters upon the tablets of our history.

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The story of the "Monitor's" building has been often told: the fertility of invention, facility in designing, speed and accuracy in drawing, promptness in execution, and unwearied industry which made the construction possible in so short a time—all these are familiar. But the minor mishaps, the special incidents which, apparently adverse, yet proved providential as contributing to that exact coincidence of time, place, and circumstance upon which so much depended—these have as yet been omitted in the telling, and without them the story is incomplete.

While the vessel was on the stocks, Captain Ericsson made frequent and for a part of the time daily visits to the yard of the Continental Works, watching operations with a keen and critical eye; but after the launch he considered this no longer necessary, and visited her but seldom. In this way it came about that, although the motive engines were put in before launching, he did not see them under steam, but contented himself with the reports of their action made by the government engineers. These engines were of what has ever since been called the "Monitor type," and many have supposed that they were, like the vessel itself, of wholly novel and untried design. This, however, was not the case. In the "Judith" and the "Daylight," and elsewhere, this form of engine had already demonstated its practical working qualities: otherwise the captain would probably have given the first trials at the dock his personal supervision.

For obvious reasons, as little publicity as possible had been given to the work during its progress, but perfect secrecy was, of course, out of the question. The turret of a monitor can not be hidden under a bushel, nor could the launching of an iron-clad vessel be concealed from the public eye; and, indeed, it had been watched by some in expectation that this strange craft, built in defiance of everything considered ship-shape, apparently overweighted with iron, and with no free-board worth mentioning, would slide off the ways straight to the bottom of the East River and never come up again. Disappointed of this sensation, the public had manifested no little curiosity to see how the "Ericsson Battery" would behave when she left the dock. This curiosity was soon gratified; the final preparations were pushed with unabated vigor, and, the engines having been reported in satisfactory working order, upon one gloomy winter's day a formal trial trip was made.

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The result of this trial was anything but encouraging, as reported in the daily papers, one of which made it the text of a "crushing" article, wherein, under the heading of "ERICSSON'S FOLLY," the battery was pronounced an ignominious failure, which could neither be propelled nor steered; the captain was called an incapable schemer, and a stern reproof was given for the sin of thus wasting the country's resources;—no words too harsh, no denunciations too severe, for the zeal of this fiery crusader. The versatility of the modern journalist stood him in good stead on the 10th of March, when the novel fighting machine had proved invulnerable to heavier blows than his pen could deal; but in the meantime it must be admitted that the battery had not behaved as well as she might. The motive engines were not in proper adjustment, the steering-gear required excessive power, and between the two the vessel proved unmanageable; the trial was given up, and she had to be towed back—a rude disappointment indeed to expectations which no one conversant with all the facts can regard as unreasonable.

It is well known that John Ericsson was by nature sanguine and enthusiastic; impetuous, excitable, and impatient of contradiction, with him it was "*Sic volo, sic jubeo, stet pro ratione voluntas*"; nor did he always in the heat of the moment consider whether his wishes could be executed by those not endowed with his own tireless energy. The events of that dismal day must have vexed his very soul, but the manner in which he bore them was strikingly characteristic. Had they been trifling things, he would have been exasperated, as his custom was, and exasperating, too, when small affairs went wrong; but under heavy burdens his broad shoulders never bent, and he looked always squarely in the face of grave misfortunes with calm and resolute eyes. It is true that on his return to Franklin Street, where he then resided, there was a somewhat portentous cloud upon his face, and no wonder; but it was not the forerunner of a storm.

At his request I brought the drawings of the valve gear, not without misgivings, for he had never examined them with a view to verification, and I alone was responsible for their accuracy. He wanted the plan showing the relative positions of the eccentrics and the main crank; and I was obliged to explain that I had no original, having made the working tracing, in order to save time, from detached drawings and a pencil diagram. He

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listened with patience and appeared satisfied with my detailed explanation, and then requested me to make a new drawing of the complete arrangement, trace it, and as soon as possible to call in the old plan, give out the new one, and give orders to have the eccentrics at once set according to it. I was then informed that during all the trials at the dock the engines had been running *backward,* of which Chief-Engineer Stimers, who, it seems, had never inquired whether the propeller were right-handed or left-handed, was not aware. Simple reversal would not, at best, have fully met the difficulty; for each slide valve was driven by a loose eccentric, which was shifted part way round in order to reverse—an arrangement which, if adjusted to give the best results in one direction, will not in that type of engine do equally well in the other. Still this could not have been the whole secret, though it was never discovered just what was; for the subsequent difference between the forward and backward running was never great enough to have caused so much trouble; and, again, the same device was used in many engines of the same form afterward, about which no complaint was made.

Be that as it may, I did not feel like taking the responsibility of giving out the new plan without his scrutiny; but he would not look at it, only saying: "You are sure it is right now? Very well; then go ahead." I did so, and, having captured the first tracing, lost no time in comparing it with the new drawing; to my great relief, they tallied exactly, so that both tracings might have been made from the same original plan.

Some time after, meeting the superintendent of the Delamater Works, I tried to ascertain the real cause of the difficulty, but without success. He asserted that the first drawings of the valve gear were all wrong, admitted that the new ones were all right, and averred that the plans had been carefully followed in both cases. After a brief explanation, I invited him to accompany me to No. 95 Franklin Street and compare the old with the new; but he found that he had not time. Captain Ericsson had once described this superintendent as "too stupid to make a blunder," which only proves that his own judgment was not infallible; but whatever the precise nature or cause of this annoying maladjustment, it is absolutely certain that it was due to no error or oversight at headquarters. And it was so quickly rectified that the trifling delay arising from this cause alone would not have pre-

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vented the "Monitor" from meeting her adversary before the eventful 9th of March.

She had become unmanageable, not only from the temporary failure of her engines, but from want of control over her steering-gear. The cause of this was that her rudder was somewhat overbalanced; the area forward of the rudder-post being too great in proportion to that aft of it. In these circumstances, the rudder, once thrown over to either side, does not readily return, but opposes considerable resistance to any effort to bring it back to its central position. Those who choose may attribute this to miscalculation; but it is for them to prove that under all the conditions, known and unknown, the exact proportion which shall require the least power can be determined by any known means. At any rate, there was the hard, uncomfortable fact; it was not the hour, nor was Ericsson the man, to indulge in idle speculations as to how or why it came there; but had he adopted the remedy suggested to him, it is morally certain that the battle between the giant and the pygmy would not have occurred when and where it did.

This remedy was neither more nor less than the replacing of the balanced rudder by one of different form. I do not know where the idea originated, nor do I say that any formal proposal was made, but in some way the captain became aware of an intention of the naval authorities to have the vessel put in the dry-dock and fitted with a new rudder. The hot Scandinavian blood flushed his cheek, his eyes gleamed, his brow darkened; and this time the storm broke in all its fury. With the full volume of his tremendous voice, and with a mighty oath, he thundered: "The 'Monitor' is MINE, and I say it shall not be done." Presently he added, in a tone of supreme contempt: "Put in a new rudder! They would waste a month in doing that; I will make her steer just as easily in three days."

My recollection is that it was done in less time. No change in the rudder was even thought of, and the change in the steering-gear was the simplest possible. Her tiller consisted of an arc of iron, with two angle-irons on the outer side; round each of these was wound a chain, which, running around a pulley below the deck, was attached to a wire tiller-rope leading forward to the pilot-house, and coiled in the usual manner round the drum of the steering-wheel. By Captain Ericsson's direction, the wire

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ropes were now detached from the chains, to each of which a snatch-block was made fast; a short chain was connected at one end to each tiller-rope, run through one of these blocks, brought back parallel to itself, and secured at the other end to a deck-beam. The purchase being thus doubled, the trouble was over and the vessel steered with ease.

Considering how precious were the moments then, the suggestion of a new rudder might well excite his indignation and disgust. But the captain's wrath was chiefly roused by the idea of any official interference with the vessel as yet unpaid for and wholly in his own hands; which was perfectly natural in view of his treatment by the government in this and other matters. It will be always recorded in the history of this country that the building of the "Monitor" was sanctioned by the authorities at Washington only upon conditions the most arbitrary and, in the circumstances, the most contemptible, ever imposed by a great government upon a great designer. At a price barely sufficient to cover the cost of materials and labor, they would accept his battery, but not until it had proved impregnable under the guns of the enemy at the shortest range; in a most critical emergency, they would take all the profit if he would take all the risk. Twenty years before, these United States had reaped the fruit of his genius and his labor, when the building of the "Princeton" had also marked a new era in naval construction. During all those years they had refused, as they have refused during all the longer years since, to pay him for his services, although in the meantime there had been days when the paltry sum would have been most acceptable; they are willing, it seems, that the memory of their meanness shall be everlasting, since they have allowed him to carry it with him to his eternal rest.

Nevertheless, as then in time of peace he had prepared them for war, so now in time of war he was ready to prepare them for peace, and that upon their own one-sided, almost humiliating, terms. To accept those terms was an act of magnanimity, and a proof, were any needed, that what he soon after said to me was true,—"I love this country. I love its people and its laws; and I would give my life for it just as soon as not." Patriotic he was, but also he was proud; the sting of the earlier injustice still rankled, and it was only at the earnest solicitation of a friend that he consented to appear in Washington to demonstrate that

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he was conferring a boon, not soliciting a favor. But for which it might not have happened that in this country and for this country were built the two most conspicuous of the many monuments of his genius that mark his path all the way from the cottage in Vermland to the halls of Valhalla.

The trial of the armament also contributed its quota to the general result, in a manner which proved to be amusing, though the consequences narrowly escaped being disastrous. It must first be explained that the friction for taking up the recoil was produced by means of two levers, actuated by a screw, with a hand-wheel at the side of the gun-carriage. Since there were two guns, pointing in the same direction, with very little space between them, the hand-wheels were, of course, placed on the outer sides of the carriages; naturally suggesting the idea that the whole mechanism was right-handed for one and left-handed for the other. But this was not so; in order to save time it was made the same for each, and in serving either gun the compression was effected by turning the top of the wheel to the left. Now, screws are ordinarily turned the other way in order to produce pressure; and Chief-Engineer Stimers, by whom the trial was conducted, would seem not to have made himself acquainted with the construction here adopted. Grasping the hand-wheel of gun No. 1, he turned it *to the right* until the resistance in his judgment indicated a proper degree of compression, and gave the order to fire. It must next be stated that the first effect of his action was to relieve any pressure that might have existed; the second effect was that the levers, whose movement was quite limited, became jammed in the supporting brackets, thus causing the resistance which had completely deceived the chief engineer. The great weapon gave a sullen roar, and, being entirely free, flew back until it was stopped by the cascabel striking against the interior of the turret.

One would imagine this experience sufficient to inspire caution; but, curiously enough, Engineer Stimers seems to have assumed that the carriages must be rights and lefts, and to have concluded that what was thus proved wrong for one was exactly the correct thing for the other. And so, without looking under the gun to see what was there and make sure of what he was really doing, he at once proceeded to experiment with gun No. 2 in the same manner, and with precisely similar results. Thus

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both guns were temporarily disabled, though, strange to say, neither was dismounted, nor were the carriages broken. The actual damage was surprisingly small, consisting chiefly in the shearing off of some bolts which secured the bearings of the guide-rollers to the carriages; these, however, were not easily accessible, and the repairs necessarily consumed some little time.

Now, it may be safely said that without the occurrence of these things, or of any one of them, the course of affairs at that critical period would have been materially changed. The minor as well as the major planets must be consulted in casting the horoscope, and trivial as such incidents might seem in ordinary times, each had its share in fixing the day and the hour of a mighty contest, and the fortunes of a nation depended on the twist of a screw-thread. By far the most important one, as measured by its possible consequences, was the trouble with the steering-gear, though from the simplicity of the remedy it might appear the most insignificant; and it was this that brought into the boldest relief the prominent traits of the captain's character His keen mechanical instinct, quick decision, firmness of resolve, his fiery spirit, his energy in action, were all conspicuous ; but all these were dominated by self-reliance and his pride in originality.

He loved to do his own work in his own way, and his fertility of expedient was something marvellous ; to quote his own words on another occasion, "If I ever do get into a scrape, I know exactly how to get out of it"; and men unlike him, as most men are, were more likely than he to follow the lines laid down by others. He had said, "The 'Monitor' is mine," and his she was, in another and to him a far dearer sense ; from turret to keel-plate, from rudder-shoe to anchor-well, every distinctive feature was the creation of his brain ; every detail was stamped with the evidence of his handiwork. It was he who had planned the mechanism which had sulkily refused to obey his will, and he, or no man, should dictate the change which would reduce it to subjection. How much we owe to this one instance of determined resolution it is not easy to say. It prevented a fatal delay at a momentous crisis, and was thus the cause of that unparalleled change in national feeling which followed, when in every hamlet it was told, "The Ericsson Battery has saved the Union." It seized the golden moment of opportunity ; it changed defeat

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into victory—victory which revolutionized naval warfare, wrung from England the reluctant admission, "Yesterday we had a great navy; to-day we have but two war-ships worthy of the name," and compelled our own government to exhibit a tardy confidence in the genius of the man whom it has persistently wronged. A grim testimonial of the fact that this confidence was not misplaced lies in the Royal Museum at Stockholm—a fifteen-inch shell with this significant inscription:

GUSTAVUS VASA FOX
Fann denna kula bland Sumters ruiner.*

And it would have been well had either of two other things been done as he wished. He had hoped for fifteen-inch guns; but they could not be procured in time. The largest available were eleven-inch, from which were fired only shells, with a service charge of fifteen pounds; against which the armor of the "Merrimac" was just strong enough to be proof. Foreseeing this, he had provided wrought-iron solid shot, to be used with a greater charge: not one was fired. The occasion would have warranted some little advance on previous practice, even if not advised by so thorough an expert as Captain Ericsson unquestionably was; that it was not made was no fault of either officers or crew, than whom no braver men ever trod a deck or served a gun; and the soundness of his judgment was proved by the subsequent use of double the quantity of powder. Had the government been able to furnish the heavier guns, or its officials been willing to sanction the heavier charges, there is little doubt that the "Merrimac" would have been quickly sent to keep company with her victims.

This had seemed to the captain so surely attainable with the means at hand that he could not regard the actual result with pleasure wholly unalloyed. Still it brought him a triumphant vindication of his bold defiance of precedent, the proud consciousness of a great service rendered to the country of his choice, the applause of a startled world, the enthusiastic gratitude of half a continent. Well might a feeling of elation take

* Gustavus Vasa Fox found this shot in the ruins of Sumter.

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full possession of mind and soul, and overcome for the time not only the will, but the power, to pursue ordinary vocations. But no ordinary man was here: exultant, proud, and happy he was—no one who saw him could doubt that; but his steadfast mind did not swerve from the even tenor of its path, nor were his usual occupations interrupted for a single day. The fighting ability of the turret ship was established beyond a question, but her sea-going qualities were still held in doubt; and hardly had the echoes died away in Hampton Roads before he sat down quietly to plan a fleet of still greater pugnacious power; one of which, besides, was yet to round Cape Horn and enter the Golden Gate, another to visit his native Sweden and anchor under the guns of Cronstadt, while a third, sent to sea like a child in leading-strings, under the care of an escort, repaid the motherly attention by towing her disabled convoy safely into port;—and thus it was proved that the monitors were fully competent to take care of themselves, of their enemies, and of their friends.

The captain was disappointed that the "Monitor" had not done her utmost during the engagement; by her subsequent inactivity he was simply enraged. He was, himself, the active voice incarnate, and the passive voice was to him absolutely incomprehensible; like the hot and angry bee, who never rests, and wonders how others can, he saw in the end of one task only the beginning of another. He had built his ship to *fight;* and I never heard him allude to the "excessive caution" which kept her idle after her one battle, without scathing denunciations couched in language as fluent as it was vigorous, and more uncomplimentary than either. Both things appear the more to be regretted in the light of subsequent events, since they afforded a pretext for the shameless tirade of Winter Davis, who said: "The 'Monitor' and the 'Merrimac' met by accident in Hampton Roads; neither whipped, and the world went wild over two guns in a cheese-box." To be sure, the point is taken out of this sting when the armaments are compared; ten guns against two is heavy odds, and there would have been enough to admire had the smaller vessel but held her own. And though our own excited people might easily make an exaggerated estimate of the result, the spectators often judge the game better that the interested players, and the world at large does not go wild over a drawn battle. Still the shallow orator spoke more truly than he knew or meant when he

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said they met by chance, for though the "Monitor" was designed expressly to fight the "Merrimac," their meeting then and there hinged upon circumstances which were, humanly speaking, accidental, if anything ever was.

It is not suprising that the fervor of an enthusiasm caused by such sudden and unexpected deliverance from impending disaster should, in a manner, overdo itself, and give rise to expectations altogether too extravagant to be realized, nor yet that this should be followed by a reaction; a populace, with proverbial fickleness, unduly depreciating what had before been, perhaps, too highly extolled. But whatever may be said in extenuation of utterances made while feelings and opinions were thus fluctuating, nothing can be urged upon such grounds after the normal level has been resumed. Still it is sometimes said now, as it was often said then, in a derogatory sense, that Captain Ericsson made many mistakes, and that he persistently refused to accept the suggestions of others. It cannot be denied that both these things are true, but the recoil of this weapon is its only dangerous feature; for due account must be taken of the new and original work which he accomplished, thereby making himself a tremendous factor in the material progress of the world during the present century. He was versatile and prolific in ideas to an extent seldom approached, his work being no less remarkable for its variety than for its intrinsic importance, while its amount was simply astounding; so that its execution, even with his unrivalled celerity, would have been impossible without uninterrupted application. Plenty there were who were willing, many much more than they were able, to give advice. Had he taken time to listen to it all, the record of what he has done would have been much shorter than it is.

Mistakes he made, and he knew it; his projects were not always successful. In exploring new fields, errors are often found assuming the garb of truth so effectually that the imposition is not at once detected; in the development of new ideas perfection is seldom reached without repeated trials; and to say that the captain made mistakes is simply to affirm that he was human; but when they are compared with the total results of his labors, the ratio is so small that no one has yet laid stress upon them who would not, in the caustic words of John Bourne, "have been a much more distinguished engineer than he is if he had

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never done anything in his life except to contrive the mistakes of Ericsson."

I have already alluded to a protest made against "the wasting of the people's money" before the first of the monitors was completed. It is singular enough that, when the last of them had been for years out of commission, the same stupid cry of indignation was repeated in reference to the highly-finished machinery of the largest of the turret ships. The absurdity of the first complaint was very soon made evident; and the second was equally without foundation, for the money thus expended was not the people's money. But what if it had been? Who, I ask, in the name of all that is just, of all that is generous, of all that is patriotic, had a better right to waste a little of it, if waste it can be called, than the man who, at the risk of his own thousands, had saved the people from the loss of unknown millions?

Such utterances serve only to show the depths to which it is possible for little minds to descend. For the very lowest standard by which such works as his can be gauged is that of money value; and leaving out of the account the advances which he had already made in naval warfare, and considering only the effects of his previous career upon the peaceful arts, upon commercial enterprise, and general material prosperity, it is easy to show that the gain directly traceable to his single-handed exertions is great almost beyond computation. The people were very largely indebted to him for the magnitude of the interests at stake;—in a word, he had done more to develop this country than he did even to defend it. Either was a more than sufficient foundation for enduring fame, but with the latter his name will be always more closely associated by every true American; and simply as the builder of the "Monitor," it is safe to say that the memory of John Ericsson will be green in the minds of men long after not only carping criticisms, but the critics themselves, with their records, their achievements and all, shall have been sunk fathoms deep in the everlasting limbo of forgotten things.

CHARLES W. MACCORD.

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LORD WOLSELEY'S MISTAKES.*

BY JEFFERSON DAVIS.

LORD WOLSELEY has twice conspicuously assumed the part of a self-appointed judge of certain military problems presented by the war between the States, and has presumed to pronounce his decisions in a tone of authority that, viewing his capacity, amuses, and, viewing his record, amazes, the reader competent to judge between the critic and the movements and men he has undertaken to criticise. In THE NORTH AMERICAN REVIEW for May he returns with increased venom to his attack on the Confederate Executive. As his reference to me is so manifestly dragged into his article, and so transparently an ebullition of temper, I had not intended to notice it. But I have been so earnestly urged by personal friends in both sections, in the interest of historical truth, to refute Lord Wolseley's slanderous perversions of Confederate history that I reluctantly yield my personal inclination to reply to him in the pages of THE REVIEW.

My reluctance to engage in the controversy relating to the war between the States is not personal only, but rests on considerations of public interest; for such controversies give occasion to demagogues for reviving old animosities that are injurious to the general welfare—animosities which, unless stimulated, will surely and speedily disappear. But, on the other hand, in order that crimination and recrimination between the States may forever cease, it is needful that the truth, and the whole truth, should be known, and not perverted in the interest of faction. An *entente cordiale* cannot rest on a partisan pedestal.

* General Wolseley having criticised the Hon. Jefferson Davis in one of his articles, it seems but fair that the ex-President of the Confederacy should have an opportunity to reply. At the same time, it should be remembered, in justice to General Wolseley, that that distinguished soldier expressly states that his articles deal only with the information supplied by *The Century's* history of the Civil War; and he cannot be held responsible for deficiencies in that source of information.—EDITOR NORTH AMERICAN REVIEW.

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For my own part in the contest between the sections I have no excuses to make and no apology to offer. I did my duty to the best of my ability, according to the faith in which I was reared and to which I adhere. What is true in my own case is equally true of my associates. Instead of being "traitors," we were loyal to our States; instead of being rebels against the Union, we were defenders of the Constitution as framed by its founders and as expounded by them. Taught by them to regard the State as sovereign and the Federal Government as the agent, not the ruler, of the State, we loyally followed the lead of the sovereign and resisted the usurpations of the agent. We do not fear the verdict of posterity on the purity of our motives or the sincerity of our belief, which our sacrifices and career sufficiently attested.

But while we of the South have no desire to keep alive the controversies of the war, it is equally due to our own self-respect and a duty to our dead associates to repel the unjust aspersions that it has been sought to fasten on the motives and conduct of the leaders of the Confederacy.

In previous attacks Lord Wolseley contented himself, as he does in the first few pages of his first NORTH AMERICAN REVIEW article, with speaking of me in a tone of lofty disparagement, without condescending to give specific reasons for his unfavorable opinion. But now, after a somewhat Olympian sentence of condemnation, the Adjutant-General incautiously gives a condensed bill of particulars, as if to justify his unfavorable opinion. He writes:

"It may be said that it was impossible for any one to foresee the dimensions to which the struggle would grow. But surely it is a statesman's business at least partially to gauge the strength of the forces with which he has to deal. The *soi-disant* statesman who began his high duties with the avowed expectation that 10,000 Enfield rifles would be sufficient to overawe the United States; who then refused the services of 366,000 men, the flower of the South, and accepted only a fraction of them, because he had not arms for more; the man who neglected to buy the East Indian fleet, which happy chance and the zeal of subordinates threw in his way; the ruler who could not see that the one vital necessity for the South was, at all sacrifice and at all hazard, to keep the ports open; who rejected all means proposed by others for placing the finances of the Confederacy on a sound basis,—that man, as I think, did more than any other individual on either side to save the Union. I have not attempted to make the charge against him as complete and crushing as it could easily be made by those who trusted him with almost unlimited powers in their behalf."

Specifications are always needed to give credence, if not currency, to false accusations against men in representative official positions; but as the acts of such men are necessarily of public

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record, they enjoy a facility of refutation rarely accorded to men in more private stations.

I might well be ashamed of my public career if I could feel that the opinion of any European stripling without an earned record of ability either in civil or military life could affect my reputation in America, and therefore I pass unnoticed his personal depreciation; but I should have graver cause to be ashamed of my administration of the Confederate Government if the allegations he makes, without proof or reference, were founded in fact.

Each and every allegation in Lord Wolseley's indictment, above quoted, is either false in direct statement or false by inference.

It is impossible, in the limited space you assign me, fully to refute all of Lord Wolseley's false statements by all the abundant proofs in contemporary records and books that I might easily submit; but in the restricted space placed at my disposal I shall notice each of his allegations as briefly as possible.

I.—"*The* soi-disant *statesman who began his high duties with the avowed expectation that 10,000 Enfield rifles would be sufficient to overawe the United States; who then refused the services of 366,000 men, the flower of the South, and accepted only a fraction of them, because he had not arms for more.*"

This assertion that 366,000 men, "the flower of the South," were offered to me and refused is so devoid of truth or probability that only the most reckless indifference to both could have uttered it. That in the then condition of the Confederate States there should have been such a numerous organization to offer itself is as incredible as that the President, who notoriously differed with most of his countrymen in apprehending a long and bloody war, should have declined the services of such a force. It is untrue as a whole and in every part. A writer of history may be expected to consult contemporaneous records rather than to accept the rumors of manifestly unfriendly writers. In this case, for example, reference might have been made to the Confederate law of that period.

In the act of March 6, 1861, "to provide for the public defence," the first section authorized the President of the Confederate States of America to ask for and accept the services of any number of volunteers, not exceeding 100,000, "to serve for twelve months, unless sooner discharged." By the second section

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it is enacted that the volunteers, when mustered into service, should be armed by the States from which they came or by the Confederate States. By the fifth section the President was authorized to accept the volunteers in companies, squadrons, battalions, and regiments. From this it will be seen that the largest organization contemplated, or which the President was authorized to accept, was the regiment, and that, beyond the power of the Confederate Government to arm the volunteers, they were required to be armed by the States from which they came. The law treated the possession of arms as the condition on which volunteers might be accepted, but the English Adjutant-General, in haste to censure, does not stop to inquire whether his "men in buckram" *had* arms.

Again, a military critic should know that, although arms are indispensable, munitions of war are also absolutely essential to troops in campaign; and his knowledge need not be very profound to lead him to the conclusion that ammunition was necessary to make guns effective. Of the early and active efforts made to obtain military supplies notice will be taken in the progress of this article.

There is not a shadow of a shade of truth in Lord Wolseley's statement that I began my duties as President of the Confederacy with "the avowed expectation that 10,000 Enfield rifles would be sufficient to overawe the United States." It is a fact of ineffaceable record that I publicly and always predicted a long and bloody struggle, and for that reason was often criticised and censured by the more ardent advocates of secession and termed "slow" and "too conservative." No Southern man had enjoyed better opportunities than my public life in Washington had given me to gauge the resources and predict the probable policy of the people of the North; for, as Senator, I had long and intimately associated with their representatives, and for four years had been United States Secretary of War. With such opportunities of ascertaining the power and sentiments of the Northern people, it would have shown an inexcusable want of perception if I had shared the hopes of men less favored with opportunities for forming correct judgments, in believing with them that secession could be or would be peacefully accomplished.

The absurdity of these statements may further be seen from the fact that, as appears from the official report of General Gor-

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gas,* chief of ordnance of the Confederacy both under the provisional and the permanent government, there was in the armories of the Confederate States, subject to my order as Commander-in-Chief, a supply of arms, inadequate, indeed, for the needs of the country, but vastly in excess of the number that, according to my military-imaginative critic, I had declared sufficient to overawe the United States; and yet it is of public record that, even before I had selected the members of the provisional cabinet, or engaged a private secretary, or had any clerical assistance whatever, one of my first acts as Provisional President, at Montgomery, was to commission Captain (afterwards Admiral) Raphael Semmes to proceed north and purchase all the arms, ammunition, and other munitions of war, and the machinery for making them, that he could buy and have delivered. In Admiral Semmes's "Memoirs of Service Afloat," it will be found on page 82 and the following pages that he reached Montgomery on the 19th of February, 1861, the day after the inauguration of President Davis. He there states that he called upon the President, who conversed with him on the want of preparation for defence and asked Captain Semmes if he could make use of him, and explained his purpose to send him to the Northern States to gather together, with as much haste as possible, mechanics skilled in the manufacture and use of ordnance and rifle machinery, the preparation of fixed ammunition, percussion caps, etc. "He had not selected all his cabinet, nor, indeed, had he so much as a private secretary at his command, as the letter of instructions which he presented for my guidance was written with his own hand. This letter was very full and precise, frequently descending into detail and manifesting an acquaintance with bureau duties scarcely to have been expected," etc.

Subsequently, upon the appointment of Mr. Mallory as Sec-

* General Gorgas reports that at the formation of the government the small arms at command were 15,000 rifles and 120,000 muskets, stored at Fayetteville, Richmond, Charleston, Augusta, Mount Vernon (Ala.), and Baton Rouge. "Besides the foregoing, there were at Little Rock, Ark., a few thousand stands, and some few at the Texas arsenal, increasing the aggregate of serviceable arms to, say, 143,000. To these must be added the arms owned by the several States and by military organizations throughout the country, giving, say, 150,000 in all for the use of the armies of the Confederacy." That is, *fifteen-fold* more than, according to Lord Wolseley, I had "avowed" as necessary to "overawe" the United States. So earnest were the efforts made by the Confederate Government to increase this number of effective arms that the chief-of-ordnance report of July 1, 1863, shows that there was then a total of infantry arms, acquired from all sources, of 400,000.

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retary of the Navy, he sent, March 13, 1861, a letter further instructing Captain Semmes to look out for any vessels suited for coast defence; and Captain Semmes writes: "Under these instructions I made diligent search in the waters of New York for such steamers as were wanted, but none could be found." Admiral Semmes adds:

"I found the people everywhere not only willing, but anxious, to contract with me. I purchased large quantities of percussion caps in the city of New York, and sent them by express without any disguise to Montgomery. I made contracts for batteries of light artillery, powder, and other munitions, and succeeded in getting large quantities of the powder shipped. I made a contract for removal to the Southern States of a complete set of machinery for rifling cannon, with the requisite skilled workmen to put it in operation."

The interference of the civil authorities prevented many of these contracts from being fulfilled at a later date.

General Gorgas, chief of ordnance, writes:

"As to a further supply of arms, steps had been taken by the President to import these and other ordnance stores from Europe, and Major Caleb Huse, graduate of West Point, and at that moment professor in the University of Alabama, was selected to go abroad and procure them. He left Montgomery under instructions from me early in April, 1861, with a credit of £10,000 from Mr. Memminger. The appointment proved a happy one; for he succeeded, with very little money, in contracting for a good supply and in running my department in debt for nearly half a million—the very best proof of his fitness for his place and of a financial ability which supplemented the narrowness of Mr. Memminger's purse."

II.—"*The man who neglected to buy the East Indian fleet, which happy chance and the zeal of subordinates threw in his way.*"

My first knowledge of the existence of such a story was derived from the New York *Sun* of November 17, 1878, in which appeared what purported to be an interview with General G. T. Beauregard to the effect that he had gone "with the messenger of Messrs. Frazer & Co. to Montgomery, had introduced the messenger to the Secretary of War, and took advantage of the opportunity to urge upon him the immediate adoption of the proposition, which was to buy some six large and strong steamers just built in England for the East India Company." I thereupon wrote to General L. P. Walker, ex-Secretary of War of the Confederate States, sending him the New York *Sun* and requesting such information as he might have in regard to the matter, and I received the following reply:

HUNTSVILLE, Ala., December 10, 1878.

Hon. JEFFERSON DAVIS, Beauvoir, Miss.

DEAR SIR: I have read the article in the New York *Sun*, which you enclosed in your letter to me of the 2d inst. I do not remember the interview with me men-

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tioned by General Beauregard, nor that any proposition was submitted to the Confederate Government for the sale to it of any steamers of the character stated here. If any such proposition was made, it has passed from my recollection.

Yours respectfully,

L. P. WALKER.

To a like inquiry addressed to Mr. Memminger, ex-Secretary of the Confederate Treasury, he replied, on November 27, 1878 :

CHARLESTON, S. C., November 27, 1878.

Hon. JEFF DAVIS, Beauvoir, Miss.

MY DEAR SIR: I have no recollection of having heard of the proposition referred to by General Beauregard. I remember my having written to Mr. Trenholm, one of the firm of Jno. Frazer & Co., to come on to Montgomery to present the advantages of establishing a depot for cotton and munitions of war at Bermuda and some station in the West Indies, and that he came on and appeared before the Cabinet, and warmly advocated this plan, and that it met with my cordial approval, but it was not approved by the Cabinet.

I remember nothing of any proposal to purchase the steamers of the India Company. Mr. William Trenholm remembers his appearance before the Cabinet in behalf of the scheme above mentioned. His address was confined to that scheme, but he says he made the proposition to the Secretary of War and to Mr. Mallory, the Secretary of the Navy, to purchase the steamers of the Oriental Company, but that they had many grounds of objection to the purchase, such as the great draught of water, which would prevent their entering Southern ports, their construction of iron, and the want of money. He has no recollection of ever having spoken to me or you on the subject, nor did it enter into the statement made before the Cabinet; and as to myself, I have no recollection of having been consulted by either Mr. Mallory or the Secretary of the War.

Very truly yours,

C. G. MEMMINGER.

It would be needless to consider why I "refused" a proposition which was never made to me, and I can only remand both the refusal and the reason for it to the region of imagination from which they sprang.

The Confederate States, being without ship-yards and without skilled workmen with whom to build cruisers and to provide for coast defences, were compelled to look abroad both to buy and to build the vessels they required. Capt. J. D. Bullock, a well-known officer of the United States Navy, had, immediately after his resignation, reported at Montgomery for orders, and was selected to go abroad as our chief naval agent in Europe. He left Montgomery on May 9, 1861, to get cruising ships of suitable type afloat with the quickest possible despatch and to buy and forward naval supplies of all kinds without delay. Whoever has read his work, entitled "Secret Service of the Confederate States in Europe," will not fail to perceive how fortunate was the selection for

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the vitally important duty on which he was sent abroad. The diligence and energy with which he filled the office intrusted to him are attested by the list of ships built and bought by him in Europe by the Confederate States Navy Department, viz., five steam cruisers, one sailing vessel, eight steam blockade-runners, one steamer for harbor defence, four steamers contracted for, but unfinished at the close of the war; total, fifteen furnished and four under construction. Nor was this all which was contributed; for, meagre as the means were from the beginning to the end of the war, there were continuous efforts to create and utilize all existing means for defence. To the Confederacy the world is indebted for the introduction of iron-clad ships. A vessel abandoned by the United States was shielded with railroad iron for the want of plates, and made a record at Hampton Roads which can never be forgotten.

I have just received (August 13) a letter from Captain Bullock, containing important testimony. Captain Bullock, as stated above, was appointed by me, when Provisional President, as the sole agent of the Confederate States in Europe for the purchase of arms, cruisers, transports, and naval munitions of war. He was appointed a captain of the Confederate States as soon as he resigned his commission in the United States Navy. His letter is as follows:

30 SYDENHAM AVENUE, SIFTON PARK, LIVERPOOL, July 29, 1889.

MY DEAR SIR: Mr. Stoess handed me your letter of the 15th instant this morning, and I hasten to reply by the first returning steamer. I have never seen the book to which you allude, namely, "The Military Operations of General G. T. Beauregard," but, in June, 1884, Mr. Charles K. Prioleau, who was then living in Bruges, sent me a copy of the Charleston *News and Courier* which contained a long, interesting, and very able review of the work.

The reviewer gave many extracts from the book, and among them one stating, in effect, that a fleet of steamers belonging to the East Indian Navy had been offered to the Confederate Government at the beginning of the war, and had been declined by them, and that the offer had been made by or through Mr. Charles K. Prioleau. Mr. Prioleau was the senior partner of the Liverpool firm of Fraser, Trenholm & Co., a firm affiliated with Messrs. John Fraser & Co., of Charleston, and the Liverpool branch held the position of the bankers and financial agents of the Confederate Government during the war of secession. Mr. Prioleau was then brought into close personal and official relations with me during the whole period of that war, and as he had never mentioned to me this alleged offer to the Confederate Government, nor had ever drawn my attention to any such ships, I was greatly surprised by the statement in the review of "General Beauregard's Military Operations." I wrote at once to Mr. Prioleau, asking him for information and requesting him, if there was any truth in the statement, to tell me why he never mentioned the matter to me. He wrote me a very long letter in reply, much of its contents being wholly irrelevant to the

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point at issue, but I enclose herewith a paper marked A*, which is a verbatim copy of all that he wrote in respect to my specific inquiries about the alleged offer to the Confederate Government.

When I went to Richmond in October, 1861, to consult with Mr. Mallory about our naval operations in Europe, he dwelt much upon the wish of the government to get cruisers afloat, and also armored ships to break the blockade. It is not possible to believe that he would have omitted all allusion to the East Indian Company's fleet, if he had ever heard of those vessels. I had just then returned from England with the "Fingal," and, as before mentioned, Mr. Prioleau had given me not a hint of the alleged offer. After my return to Europe, I both heard of and saw some of the ships, but a glance satisfied me that to buy them for the Confederate Navy would have been a senseless waste of money. They were very big ships, drawing too much water to enter any Confederate port on the Atlantic coast. At the time I saw them they were wholly dismantled, and without guns or any military equipment. To arm and man them for the purpose of attacking the blockading ships would have required the resources of a well-furnished dock-yard, and the right to enlist seamen without interference. It would have been impossible to equip so large a naval force upon the high seas, or at some secret place of rendezvous, as was done with the "Alabama" and other cruisers. To put those ten ships in fighting condition would have required about one hundred heavy guns, and from twelve to fifteen hundred seamen, stokers, etc., with a large supply of small arms and ordnance stores. It would also have been necessary to have several large coal-transports to accompany the fleet, as the ships had only auxiliary sail power, and were dependent upon steam for motive power.

If Mr. Mallory had ever suggested the purchase of these ships, I should just have mentioned the foregoing facts, and have drawn his attention to the proclamation of Her Britannic Majesty, the British neutrality laws, and the restrictions in respect to

* A.

BRUGES, 21st June, 1884.

MY DEAR BULLOCK:

. . . As regards the ten steamers, I thought you knew about them. They were a part of the East India Company's fleet, the "Golden Fleece," "Jason," "Hydaspes," etc.; they were offered to me at the very beginning of the war, before you came over, and before the Queen's proclamation. My idea was that if they could have been armed and got out, they would have swept away every vestige of a Federal blockader then upon the water. Fraser, Trenholm & Co. had not then been appointed agents of the government, and I did not offer these vessels to the government, but I mentioned them in a private letter to Mr. G. A. Trenholm, leaving it to his discretion to put it before them.

As a matter of fact, I never got any reply to this letter and never knew that the ships had even been proposed to the government till long after the war. No further inquiries were ever made of me concerning them from any quarter. About nine or ten years (or perhaps not quite so much) ago, General Beauregard wrote me, saying that he was engaged upon his history, that he had heard about these steamers through William Trenholm, who had referred him to me for the particulars, and asked me if I would give him a statement, and allow him to mention my name as to my part of the transaction, to which I willingly consented and gave him just the facts stated above. Of course, I know *now* that the enterprise would have been impossible, but we did not know anything for certain then; and any opinion of mine would have been that of a layman and on its face valueless; therefore, when I heard no more I naturally concluded either that Mr. Trenholm had not thought it worth while to propose the undertaking, or that the government had been advised against it by their competent officers, and there is no doubt now that they were quite right not to risk so large a sum of money on so doubtful an enterprise, even if they could have readily raised it. It is, however, a little strange that, if the government knew of these ships at the time you left, they did not instruct you to look at them. On the whole, I am inclined to think that they were never offered to the government at all, but William Trenholm knew of them from having access to his father's correspondence. . . .

I am, ever yours sincerely,

C. K. PRIOLEAU.

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the coaling of belligerent ships proclaimed by all the neutral powers, and he would have perceived the impracticability of such an undertaking. At a later period of the war Mr. Mallory did direct me to examine two vessels, which I have reason to believe belonged to the same fleet. On page 253, Vol. II., of "The Secret Service of the Confederate States," you will find my report with reference to them. I think at the moment of nothing else worth mentioning on the subject of your letter, but will be glad to give you any further information you may wish, if in my power to do so.

Very faithfully yours,
JAMES D. BULLOCK.

To Hon. JEFFERSON DAVIS.

In the face of facts like these, and many others to which the want of space does not permit me to refer, this self-constituted authority upon military affairs and civil government, ignorantly or maliciously—to me it matters not which—proceeds on an assumption which had no real foundation to characterize me as

III.—"*The ruler who could not see that the one vital necessity for the South was, at all sacrifice and at all hazard, to keep the ports open.*"

An Englishman of ordinary intelligence might be expected to know how vigilant his government was in preventing even unarmed merchantmen from leaving their ports, if any one would allege that they were intended to be converted into war-ships for the use of the Confederate States. The espionage to which Captain Bullock was subjected and the delays which resulted from forcing him to appeal to the courts must show how flippant and absurd it is to assert that a fleet of steamers might have been purchased, manned, and equipped, and sent out as cruisers to raise the blockade of Confederate ports. Captain Bullock, vigilant and active, inquiring as well in the ports of Great Britain as those of the Continent, seems never to have found this fleet of steamers so admirably adopted to war purposes that with them the Gulf and Atlantic seaboard might have been so cleanly swept that the commander of the fleet should have carried a broom at his masthead.

The next arraignment by Lord Wolseley's unbridled imagination is to describe me as

IV.—"*The ruler who rejected all means proposed by others for placing the finances of the Confederacy on a sound basis.*"

This is understood to be the long-ago-exploded theory that the Confederacy should have sent out the cotton crop of 1860–'61 and placed it as the basis of credit in Europe. In answer to this visionary charge against the administration as the cause of Confederate failure, Mr. C. G. Memminger, the Secretary of the Treas-

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ury, on the 27th of March, 1874, wrote to the editor of the Charleston *News and Courier* a letter from which the following conclusive extracts are made :

"The Confederate Government was organized in February, 1861. The blockade was instituted in May, thus leaving a period of three months in which the whole cotton crop on hand, say 4,000,000 bales, ought, according to this military financier, to have been got into the hands of the Confederate Government and to have been shipped abroad. This would have required a fleet of four thousand ships, allowing one thousand bales to the ship! Where would these vessels have been procured in the face of the notification of the blockade? and was not as much of the cotton shipped by private enterprise as could have been shipped by the government? When so shipped, the proceeds of the sale were in most cases sold to the government in the shape of bills of exchange. The superior advantage of this plan is evinced by the fact that throughout the year the government exchanged its own notes for bills on England at par, with which it paid for all its arms and munitions of war. . . .

"C. G. MEMMINGER.

In answer to the same vague assertion, G. A. Trenholm, the successor of Mr. Memminger in the Treasury Department, wrote to the editor of the Charleston *News and Courier* a full answer, from which I make the following extract :

"Let us examine the facts upon which this theory rests, and without the support of which it must necessarily fall to the ground. The crop of cotton available for this scheme must have been that of 1860-'61. It could not have been the crop of which the seed was not yet put in the ground when the government was formed at Montgomery. What was, then, the crop of 1860-'61? Was it 4,000,000 to 5,000,000 bales, and was it accessible for immediate exportation? . . . Up to the 28th of February, the month that gave birth to the infant government, 3,000,000 bales had been received at the seaports, and the great bulk of it had been exported to Europe, or been sold to the New England spinners. By the 1st of May 586,000 bales more had been received and sold. England and the Continent took 3,127,000 bales; the New England spinners 654,000 bales. It will thus be seen that before the new government was fairly organized *the entire crop was already beyond its reach!* Another crop followed, but the exportation in any quantity was an absolute impossibility. There were no vessels in the ports of the Confederacy. The last had left before the expiration of the sixty days allowed to foreign tonnage. The only vessels that took cotton after that time were the foreign steamers that ran the blockade to procure cargoes for the owners. They came in small numbers, and one or two at a time. Had the government seized one of them for its own use or prevented them from leaving with cotton, they would have ceased to come."

These extracts from the letters of two of the ablest financiers of the South, whose close relation to the Treasury Department gave them the best opportunity of knowing what could, should, or might have been done, will, it is hoped, be satisfactory to any who have doubted the propriety of the financial policy of the Confederacy, or who have not seen that the plan proposed was utterly impracticable.

JEFFERSON DAVIS.

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THE OPEN DOOR OF QUACKERY.

BY DR. WILLIAM G. EGGLESTON, OF CHICAGO, DR. AUSTIN FLINT, PROFESSOR OF PHYSIOLOGY, AND DR. R. OGDEN DOREMUS, PROFESSOR OF CHEMISTRY, IN BELLEVUE HOSPITAL MEDICAL COLLEGE.

So far as I have been able to discover by extensive investigation, this country (the United States) is the only one in which a fraudulent medical college has ever existed; the only country in which the National Government exercises no control whatever over medical education—a matter of the most vital importance to the public; the only one in which several sections of the country have medical laws all of which are different; the only one in which the signatures of a few stock-holding professors in a medical college entitle the holder of a diploma to practise medicine; the only one in which the educational requirements for admission to and graduation from *legally incorporated* medical colleges vary from *nil* to very high; and the only country on earth in which the *extinct* medical colleges almost equal the number of extant ones—one hundred and five of the former and one hundred and seventeen of the latter, exclusive of preparatory schools.

Our National Government exercises no control whatever over a matter that directly affects the comfort, wealth, health, and lives of the people—medical education and medical practice. Of no other country that pretends to any civilization whatever can this be said. Not to mention the countries of higher civilization, those that we are accustomed to look upon as somewhat or very low down in the scale of modern civilization, such as Finland, Rumania, Spain, Guatemala, Mexico, Chili, Peru, Uruguay, Venezuela, Syria, Turkey, Japan, and Egypt, all exercise a direct control over medical education, medical practice, and the public health. The whole list of countries that exercise such control is thirty-one, the United Kingdom and its colonies being counted as one.

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"But," some one says, "the cases are entirely different. In each of those countries there is practically but one government; in this country practically between three and four dozen. Medical education is not in the hands of our National Government, but must be regulated by the State governments. The National Government has no right to interfere in such matters." Here, then, we are confronted by the doctrine of State Sovereignty, a two-edged weapon, which cuts both ways at the whim of the person using it. While there is no clause in our Constitution granting to the Federal Government the supervision of educational matters, there is a "general welfare" clause, and I take it that education of the people and the health of the people come under any definition of the terms "general welfare of the people." And we have not always held the Constitution a sacred thing. One of its clauses or articles provides that no new State shall be made from a part of an already existing State except by consent of the people of the latter,—an article that has been violated in at least one instance.

What has been the outcome of leaving the regulation of medical education and practice in the hands of State legislatures? As regards medical education, the most that any State has done is to be seen in the recent Minnesota act, which provides for a definite term of study in all the colleges of the State, and appointed a Board of Medical Examiners, who are to examine all applicants for license to practise medicine, but who shall examine no candidate unless he be a graduate of a school requiring three full courses of medical study. This law, of course, reacts on colleges patronized by Minnesota students and on men intending to practise in that State. Some years ago the State of Illinois created a State Board of Health, and placed medical educational matters in its hands, with certain provisions. This board made a "schedule of minimum requirements," to which every college in the country must conform in order that its diplomas may be registrable in Illinois. Students from colleges that fall short of the requirements of the Illinois board must stand an examination before the board before the license is issued. Missouri has a board created under a law similar to that of Illinois. Indiana has a medical act unlike any of these. In Michigan medical education and practice are go-as-you-please matters, as is the case in Texas and several other States. Thus far it has been impossible to get a legis-

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lature to pass any medical act in these States that would be of any service. In Virginia, North Carolina, and three or four other States, boards of medical examiners have been created by the legislatures. The diploma counts for nothing, and every candidate for license must stand an examination before the board. In Pennsylvania the medical act is unlike that of any other State, and remarkable chiefly for its inefficiency. There has been recently passed in New York a revised medical act, complicated and verbose to the last degree, and, like the medical acts of most of the other States, different from all the others. In short, at the present rate, if we had a thousand States in the Union, and each one had a medical act, we should have about eight hundred different medical acts in the country, and none for the District of Columbia.

How can we account for this great diversity of the State laws in the States that have attempted legislative interference with medical practice? It certainly is not due to the fact that the framers of the acts have had nothing to guide them. An examination of the medical acts of the thirty-one foreign countries will show that there is greater uniformity among them than among a smaller number of State medical acts in this country. It cannot be that the conditions of medical practice are different in the different States. The conditions of practice, outside of any legislative interference or regulation, are the same in the red spot on the map called Indiana as in the green spot called Ohio. But, just as every one thinks he can edit a newspaper, every doctor who thinks of the matter at all thinks he can frame a medical act that will be more perfect than any other act. When this is taken before a State legislature, each legislator thinks he can make an important amendment or change, and in order to secure his vote that must be made. The results are the acts that we have.

As I have said, there is a uniformity running through the medical laws of other countries. The chief points of uniformity are that each country begins at the foundation, and prescribes the amount of general education that a person must have before entering upon the study of medicine; each one prescribes the number of terms that must be spent in the colleges in the study of medicine; almost all prescribe the methods of study (in the sense that the courses must be graded); almost all prescribe the number of examinations that each student must stand and pass before he is

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entitled to his degree; and almost all require the applicant for license to stand a state examination, the diploma not entitling the holder to practise. More than this, almost all prescribe that before the candidate can come up for the state examination he must have had a certain amount of hospital experience. Not one of our State medical acts or medical boards demands and prescribes all of these things. In the United States the longest course required by any board at present is three years of study in college. With the exception of Belgium, all foreign countries require from four to seven years, including compulsory hospital instruction.

One reason, I think, why the framers of our medical acts have not profited by the acts of foreign countries is the very prevalent idea that what is foreign is not good and whatever is American is the best in the world. By a process of careless thinking, and by the tiresome boasting of those that wish for popularity, we have come to think that our Republic is the largest on earth, and therefore the best; that all the conditions of existence and government in this country are antipodal to those of any and all other countries, and that everything in the shape of legislation and social regulation in a "free country" should be essentially different from what obtains in non-republican countries. I believe that our methods of thinking and reasoning in such things have been very injurious to the actual progress of this country.

Legislative regulation of medical education in this country has been spasmodic, diverse, and too frequently misdirected. The results may be seen by looking at the condition of our medical colleges. An honorable and very small minority have taken a firm stand for high medical education. The majority of them, however, being in the hands of private individuals, conducted for the money that can be made out of them, have done nothing in the way of raising our low standard of medical education except by compulsion of the few efficient State medical boards. There being enough medical colleges in this country to educate medical men for 300,000,000 people,—since we have but about one-fifth that number,—the competition is of the kind that kills. Complaisant legislatures have chartered unnecessary colleges, "professors" have invested money in them, and that money must be made to bear interest. In order to draw students, the standards for matriculation and graduation have been put down so low as to make an American diploma almost a reproach in other countries.

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So long as there were no State boards to examine candidates for license to practise, or to reject diplomas from legalized diploma-mills, many of these institutions flourished, the stockholders being regardless of the rights of the public and recreant to the profession they ceased to honor. When the State boards were created, however, and began to do their duties, there went up a great cry from the large number of low-class medical colleges. Their students had been graduated, often with honors, only to be ignominiously plucked by a State board. Here was a state of things. Those graduates held pieces of parchment that had always in this country been the license to practise; now the State boards began to show that many of the colleges were graduating incompetent men. The Illinois board and the boards of North Carolina and Virginia especially have shown that some of the colleges that make great pretensions are but little better than diploma-mills. Yet, since but a very few of the States have any efficient medical acts and boards, the candidate rejected in one State has only to go to a State in which there is no board to pry into his ignorance and unfitness for practice, and there prey upon the confiding and unprotected people.

Still another result of non-regulation of the colleges and medical education has been to overstock the country with doctors. For every doctor in the country necessary to perform the functions and work of a practitioner, there are two unnecessary ones, and the percentage of unnecessary doctors is increasing, though not at the same rate as before the few efficient State boards began their work.

In the opening paragraph of this paper I spoke of the fraudulent medical colleges of this country. As I said, I can find no record of the existence of fraudulent colleges—colleges that exist solely for the purpose of selling diplomas—in any other country. The whole number of these that have been exposed and broken up is, I think, more than a dozen, and the majority of them owe their exposure to Dr. John H. Rauch, secretary of the Illinois State Board of Health. It does seem singular that an officer of the State of Illinois should have to interest himself directly to expose and break up fraudulent colleges in Massachusetts, Pennsylvania, and other States; but such has been the case. So long as there were no State boards to inquire into the diplomas of persons wishing to practise medicine, or to examine such persons, these fraud-

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ulent schools had but little, if anything, to fear. A diploma carried with it the right to practise, and, so far as the people knew, one diploma did not differ from another. It is estimated on tolerably reliable data that there are in this country about 10,000 men practising medicine upon the diplomas of one of these fraudulent schools, and it is known that some of these men never studied medicine for ten minutes. One of these schools, the Bellevue Medical College, Boston, Mass., sent a diploma C.O.D. to a young journalist of Springfield, Ill., upon his writing the following thesis, at the instigation of Dr. Rauch:

VACINATION.*

THE Grate increase of Disease in thease Late years Calls for Explanation Undoubtedly the Doctors of this day is to blame for very much of it But more than anything Else in my opinion is the Inseartion into the Pure Blood and Vitle fluid of our Inosent offspring of that vile Diseas of the Animals cowpox So grate has the Curse Became that Privelidges of School Edication is Denide in this and Many other States to those who wisely Refuse to Submit to this Curse that is just a Peace of the Nonsensikal Medical teachings of the Day when Theory and Imagination Rool Instead of Practical Expearance and which keaps its Studends in close Confinement a Big part of three or four years to hear the Nonsens which is thear peddeld out to them consumtion Siffles and Skin Disease Runn Wild among the People This calls for a Strong kick on the Part of our noble Proffession which should seak to Build upp the Health and Streangth of the People instedd of Planting the Seeds of Diseas in them To Prove that Vacination Dont do no good we nead ondly to say that Thear has Been More Small Pox in this Place in the last year than thear was in the last Nineteen or Twenty year and more deaths from it I neadnt say no more About a Thing that is so Plane to Eny thinking man or Woman Eather we should all Band ourselves togather in all Parts of the Country to Shut off this Cursed Practiss the people Should be tought Better But the Days is Cuming when Enlightenment will take the Place of Ignoranse and Prejudice and when that Time Comes these fannatics who live by Scaring People will have to step aside and Vacination will not be Heard of any more.

BY V B KELLY.

"Comment on the foregoing," says Dr. Rauch, "would be entirely superfluous, were it not that this travesty on much that goes for Medical Education in the United States is so ludicrous as to mask the satire it contains. It would not be difficult to parallel the tenor of the Third Year's Announcement of the Massachusetts Bellevue with announcements of older institutions not chartered as 'manufacturing corporations.' Nor is the mode of making out the necessary time 'spent in the study of medicine' entirely unfamiliar to many colleges which claim to be in good standing, and which, unfortunately, are accepted as such. How many ignoramuses with not one whit more of education, either literary or medical, than is displayed in the essay on 'Vacina-

*The president of the school was a rabid anti-vaccinationist.

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tion,' are every year turned loose upon the public, each bearing a 'diploma' reciting that some particular Rufus King Noyes and his colleagues have adjudged and decreed the bearer (in the sonorous Latin of the Bellevue sheepskin, price $150, C.O.D.) *hominem egregium studiis optimus deditum*—a distinguished man devoted to the noblest pursuits—*dignum atque idoneum qui honoretur altissimo dignitatus gradu*—worthy and fit to be honored with the highest mark of distinction. Having sufficiently investigated (as to his scientific and scholarly attainments)—*satis compertum exploratumque habemus*—as witness the thesis on 'Vacination,' we, to wit: Rufus King Noyes, with one consent—*uno animo*—have created and made—*creavimus et fecimus eum Doctorem Medicinæ*—literally 'manufactured' him into a doctor!"*

It is scarcely necessary to say that most of the extinct medical schools (the number of which is one hundred and five as against one hundred and seventeen existing American schools) never had any good excuse for being in existence. With not more than four exceptions, the medical profession and the people of the country would be better off had these schools never been founded. The very fact that they have passed out of existence in a country in which the lowest grade of medical schools can exist, most of them being of that class, is sufficient to show that there was no good reason for their being brought into existence. We have more of these extinct schools than all other countries combined.

While we have one hundred and seventeen medical schools

*The charter of this Bellevue College of Boston was repealed in 1883. Its first officers, on the trial which resulted from the exposure, pleaded that they were legally incorporated, and were empowered by the laws of Massachusetts to issue diplomas and confer degrees without any restriction as to course of study or professional attainments. The United States Commissioner, before whom the trial was had, held the plea to be valid, and dismissed the case with the following remarks: "The State has authorized this college to issue degrees, and it has been done according to legal right. . . . The law makes the faculty of the college the sole judges of eligibility of applicants for diplomas. There is no legal restriction, no legal requirements. *If the faculty choose to issue degrees to incompetent persons, the laws of Massachusetts authorize it.*" As a result of this decision, the "American University of Boston," and the "First Medical College of the American Health Society," were incorporated under the same authority as the "Bellevue"; and the "Excelsior Medical College" and others were projected. The passage (June 30, 1883) of an act forbidding any corporation, organized under the public statutes above referred to, from conferring medical degrees or issuing diplomas, or certificates conferring or purporting to confer degrees, unless specially authorized by the Legislature so to do, deprived these concerns of the only object of their creation, namely, the sale of fraudulent diplomas.—*Illinois State Board Report.*

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that grant degrees, there are less than two hundred medical schools outside of the United States. Taking the average of all other countries as a fair average, we have, as I have said, schools enough in this country to educate medical men for 300,000,000 people. Were these schools of a high class, and doing good work, no one could object to their continuing in existence. It is only a small minority, however, that do even tolerable work. To determine this, we must take the statistics of a State Board of Medical Examiners in a State in which all applicants for license are examined. The last report of the Virginia Board of Medical Examiners (April 20, 1888) shows that two hundred and twelve candidates have come before that board since January, 1885, and fifty-four, or a little more than 23 per cent., failed. These candidates came from twenty-six colleges of this country. The candidates from thirteen colleges all passed; while the other thirteen colleges sent one hundred and fifty-six candidates (graduates), and an average of more than one-third was rejected from each college. Now apply these figures to the more than thirty-six thousand graduates of American colleges from 1877 to 1887, and see how many men are practising medicine that would have been rejected by the Virginia board—more than eight thousand!

But however good medical-practice acts and boards Virginia and Illinois and North Carolina may have, and however many applicants for licenses to practise they may reject, there are States adjoining these that are unprotected, and into these and the other unprotected States the incompetent and rejected graduates go. The Illinois, North Carolina, Minnesota, and Virginia boards not only reject incompetent men, but the very fact of the existence of these boards deters a large number of consciously-incompetent men from applying for license in those States. Consequently the States that have no medical acts and boards that amount to anything suffer all the more.

As a matter of fact, however, such acts and boards as I have mentioned have frightened many of the low-class colleges into doing better work. And should every State have an efficient board, we would soon see a practical example of survival of the fittest, and death of the low-grade colleges. Of course, the low-grade colleges will be heard from on the subject of boards of medical examiners. In fact, one in Virginia has been heard from already. This college was in favor of the Virginia board

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until it began to be shown by the examinations of the board that it was graduating incompetent men. Then there was a terrible wail from the college (the Medical College of Virginia) and from its students, and the State Legislature was beset to exempt the students of this college from the examinations—a practical acknowledgement that the college was doing bad work. Fortunately, however, the Legislature did not see why the students of this college should be exempt from examinations. When boards of examiners are created in other States, other colleges will be heard from. They must either do better work or become extinct, and the sooner they mend their ways the more chance have they of surviving.

There are not a dozen American medical colleges out of the one hundred and seventeen that would be tolerated for a moment in any foreign country that pretends to be civilized. And while, on account of some of our dead and living eminent medical men, the profession of America is respected in other countries, American diplomas, as a class, are a byword and almost a reproach among the profession in foreign countries. And thus will they continue to be until medical education and practice are regulated throughout the country. For years the representative men of the profession have been before the State legislatures and asked for such regulation. All the legislation that exists has been obtained by persistent effort on the part of the medical profession. On the one side have been the better class of medical men; on the other side the quacks, charlatans, low-class colleges, and some newspaper men who are "agin the doctors" because they do not advertise in the newspapers.

In the matter of medical legislation the States have failed in their duty. The indications are that they will continue to fail in this respect. To protect the health and lives of the people is the plain duty of any and every government. To get the best results, and to insure uniformity of regulations, the whole matter should be placed in the hands of the Federal Government. Why should we lag in the rear of all other nations?

WILLIAM G. EGGLESTON.

IT IS not putting the statement too strongly to say that in the United States the door is open to quackery wider than in any other civilized country. As we, as a nation, become older, our people are more and more efficiently protected against public dan-

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gers of various kinds, such as the unrestricted sale of poisons, the erection of unsanitary and unsafe buildings, and the many acts of violence that occur in newly-settled regions. It is time, at last, for the medical profession to make a united effort to protect the people against quackery; for the disjointed, spasmodic, and crude attempts that have been made in this direction have resulted in but little good except in a few States. Every physician knows that absolute protection is impossible. Many unfortunates, afflicted with incurable or tedious chronic diseases, grasp at anything that offers a hope of relief, whether it be a remedy recommended by a sympathizing friend or a cure advertised in the secular press. Unhappily, the demand for panaceas and for the services of those who claim to cure by extraordinary means is not confined to those who are deficient in intelligence or weakened and discouraged by exhausting diseases. So long as the love of the marvellous exists, so long will there be a certain demand for quackery, and the supply will not entirely fail.

Dr. Eggleston's article is most timely; but while it demonstrates clearly enough the magnitude of the evil of quackery, it presents no definite plan of relief. Such a plan should emanate from the medical profession. Of course, the ideal remedy is in the intelligent regulation of the practice of medicine by the general government; but I shall dismiss this with the statement that, in my opinion, it is impossible. Nearly the same result, however, would follow if concerted and uniform action could be taken simultaneously by all the States.

It is difficult to accomplish much good so long as a serious antagonism exists between the colleges and any respectable part of the general profession; but I think that whatever antagonism exists can be harmonized upon a basis of well-considered and judicious legislation. The influential colleges must cöoperate with the profession at large, or failure is probable. An experience of more than thirty years in medical teaching, and much thought devoted to the questions considered by Dr. Eggleston, have led me to certain definite ideas concerning practical and practicable measures for the elevation of the standard of acquirement in the medical profession by legislation. It seems to me that if a comprehensive act were passed in the State of New York, which would evidently accomplish the ends so much to be desired, but little effort would be required to secure the adoption of similar acts in other States,

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and that practical uniformity of law in all the States of the Union would be the final result. I shall first outline what, it seems to me, would be a proper act, and afterward give my reasons for certain of its provisions.

I. The regents of the University of the State of New York to appoint a board of medical examiners, to consist of fourteen members, seven to be nominated by the unsectarian medical colleges empowered to confer the degree of M. D. in the State of New York, and to be teachers in said colleges, and seven to be nominated by the unsectarian State medical societies; the board to be so constituted that there shall be two examiners for each of the seven subjects of practice of medicine, surgery, obstetrics, materia medica and therapeutics, physiology, anatomy, chemistry, and the collateral branches.

II. After a certain date, no person to be permitted to practise medicine who has not received a license from the board of examiners, with the following exceptions:

(a) Physicians registered up to the date mentioned.

(b) Physicians from other States and from foreign countries who hold licenses from boards of examiners the requirements of which are in no degree less than those of the board of examiners of the State of New York; such licenses to be examined and endorsed by one of the medical colleges of the State of New York and certified to as meeting the requirements of the board of medical examiners.

III. The board of examiners to recognize, in their examinations, but one science of medicine; but no candidate to be rejected by reason of his adherence to any sectarian system, such as homœopathy, provided he pass the regular examination of the board.

IV. A candidate to be eligible to appear for examination before the board, if he produce a diploma from an incorporated medical college of the State of New York or from a recognized medical college not in the State of New York, the requirements of which were in no degree less than those of the medical colleges of the State of New York at the time the diploma was issued.

V. The votes on candidates to be by the seven subjects before enumerated, and two adverse votes of the seven to reject a candidate; provided that no candidate shall be licensed who receives an adverse vote in either one of the subjects of practice of medicine, surgery, or obstetrics.

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VI. A candidate who has been rejected not to be eligible for reëxamination until at least six months have elapsed since his rejection; but the reëxamination, at the discretion of the board, may be upon those subjects only in which he has failed to pass on his previous examinations.

VII. In voting on candidates, no vote on any subject to be accepted as affirmative unless both examiners on that subject shall agree. In case of disagreement, the vote to be regarded as adverse; provided that when but one examiner is present at the examination he may cast an affirmative or a negative vote, and that, when neither examiner is present, another member of the board may be assigned to examine, and his vote shall be received.

VIII. The board to have the power to revoke the license of any physician for certain causes, such as conviction of crime, grossly unprofessional conduct, etc.

After a certain date, the following to be the requirements of the medical colleges in the State of New York:

1. A matriculation examination, made within the first thirty days of the regular session or before, for those who have not a degree of A.B., B.S. or Ph.D., provided that equivalent matriculation examinations from other recognized colleges may be accepted.

2. An obligatory three-years' course, each course to be of not less than twenty-two weeks' duration, and no two courses to be taken within a single year.

3. At least two courses of dissections.

4. At least one course of laboratory work in chemistry.

5. At least one practical course in normal and pathological histology.

6. At least one clinical course each, with practical exercises, on practice of medicine, surgery, and gynæcology, of not less than twenty-two weeks' duration.

7. Colleges to make, yearly, complete and detailed reports to the regents of the University.

8. If it shall appear at any time that the provisions of the law with regard to medical colleges have been wilfully violated, it shall be the duty of the regents to recommend to the Legislature that the charter of the offending college be revoked.

In my opinion, it would be possible, if the unsectarian colleges of the State of New York would meet in convention, to frame a

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comprehensive bill which would be satisfactory to the profession and would measurably protect the people against professional incompetence and quackery. If such a bill should be endorsed by the State medical societies and introduced under the auspices of the regents of the University, it would probably be passed.

There are certain points in the constitution of the board of examiners which I think the profession should insist upon. In no examining boards abroad is there a recognition of any sect in medicine. While it may be wise to provide that no candidate for a license shall be rejected by reason of any peculiar views which he may adopt, there is but one science of medicine. A so-called regular physician has the largest latitude of opinion, and he continues to rank as a regular physician so long as he adopts no sectarian designation. No man should be licensed to practise before he has shown by examination a certain proficiency in medicine. It remains with himself afterward either to adopt any designation, to advertise or employ any of the methods of the charlatan, or to practise simply as a physician. It is worse than absurd to exclude from examining boards professors in medical colleges. No one with any considerable experience in teaching and examining can fail to know that the most competent examiners are teachers. In a science the progress of which is so rapid, the chances are that those most likely to be fully informed with regard to recent advances which students should be expected to know, are teachers; and it is a gratuitous insult to professors in medical colleges to assume that they would be likely to act unfairly in examinations. It is proper, however, that, in functions so important, the general profession should be represented, as in having the examinations conducted jointly by two persons in each subject, one of these not being a professor.

The same argument may be applied to the requirement that candidates shall already have passed an examination and been graduated by a medical college. This would certainly secure a higher grade of attainment than if candidates were examined by the medical board only. The requirement of a certain number of years of instruction is also essential. The medical department of the University of Virginia will graduate students after only nine months of study. I think it may be safely assumed that no student can be properly educated in medicine within that time. Under the existing conditions in this country, three years of

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medical study seem to be sufficient. Students here do more work and less play than abroad; the teaching and drilling in the schools are more efficient; and, finally, the report of the president of Harvard University on the optional four-years' course in the medical school does not show that students who have taken that course are better educated than those who have been graduated in three years. Study after graduation and not with direct bearing upon examinations seems to produce better results in most instances than a lengthened course before graduation.

One of the most desirable and at the same time difficult things to secure is tolerably uniform legislation in the different States. A reciprocity of action will do much to promote this object, and, with this in view, a recognition of licenses issued by examining boards of other States, the requirements of which are not less stringent than those of the New York board, should be provided for. Foreign credentials, also, from boards fully equal in their requirements to the New York board, should be recognized. The examination and endorsement of such documents could be best and most conveniently done by the colleges.

I fully agree with Dr. Eggleston that there are very few medical colleges in the United States in which the teaching is so thorough and efficient as it is in Great Britain, France, or Germany; still there are some in which the instruction is, in certain regards, even superior to what is found abroad. Many of the smaller colleges, however, are absolutely beneath contempt, and their inefficiency is simply disgraceful, while, at the same time, they publish in their circulars the most elaborate and high-sounding methods and requirements. The four medical colleges in Washington hold their lectures in the evening for the convenience of students who are at work in the departments during the day. Were certain colleges to form an association and refuse to recognize the tickets and diplomas of those institutions which do not come up to a proper standard of efficiency, most of these disreputable organizations would soon cease to exist.

AUSTIN FLINT.

IT IS undoubtedly true that a large number of students of medicine in Europe have received advantages in preliminary education superior to students in the United States. But we must

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not forget that many of our graduates have enjoyed the privileges of a classical curriculum prior to undertaking their medical studies. Some prefix A.B. or A.M. to their M.D. Many more might do so, but wish to avoid appearing pedantic. Through competitive examinations they succeed in securing positions in our hospitals, and, after a thorough training, avail themselves of foreign travel and European climes, or study under some specialists, while others take a second degree abroad.

Even our best-informed citizens are probably not aware of the fact that in our municipal colleges there are hundreds of physicians who take *ad-eundem* degrees after having been engaged in practice for several years. This is a demonstration of their zeal for knowledge and of the rapid advancement of medical science. They not only attend the lectures and clinics, but respond to questions in their class "quizzes," like the undergraduates, and submit to as rigid final examinations. Of what other profession can this be said ?

The late Dr. John Whittaker, renowned for his skill in drilling medical students, and subsequently a successful professor of anatomy in this city, informed me that when he came to this country he was surprised at the greater aptitude of American students for acquiring knowledge over those he had instructed in Great Britain, where he graduated and taught for many years. Our students "meant business"; the limited means of most of them restrained them from wasting valuable time in frivolity or idleness. Our young men, in every department of life, whether professional or of a business character, assume responsibilities at an earlier age than those in Europe. Fifty years ago classical colleges received students at the age of fourteen. Now the preliminary training requires several additional years.

As a consequence of the peculiar application in our land of the old adage "*Ars longa, vita brevis,*" we omit in our medical courses themes of minor value and substitute those of more vital importance to the medical practitioner. Of course, all knowledge is of service in developing the intellectual faculties, broadening the range of thought, and producing a more matured man. While it is essential for a doctor to know something of the Latin and Greek languages to comprehend medical nomenclature and write prescriptions, yet I doubt the wisdom of the old system, where a boy commenced the study of Latin at

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eight years of age, of Greek at nine, and continued said studies through his collegiate course, devoting a goodly part of ten years to the classics, to the exclusion of the modern languages, which he should be able to read with facility (if not to speak them fluently) in order to place German, French, and Italian journals and scientific books at his command. Centuries past, learned men employed the Latin language as the vehicle of their thoughts, and all aspirants for knowledge in medicine, law, or religion had to be classical scholars. But a new era has arisen. The *living* languages are more in demand than the *dead* ones.

For the average medical man the higher branches of mathematics, such as conic sections, the calculus, etc., have little value, excepting as a means for developing certain brain powers. The Almighty has permitted us to solve many of the problems hidden to our ancestors. The rapidly-developing themes of chemistry and physics demand the attention of the medical student. Some of the old practitioners decry these studies.

The mystery of animal heat has been revealed, and although in regard to the nervous system we might in former times have written over the human body, as on the old charts of Africa, "*unknown regions*," yet the physicist and chemist have undertaken the exploration. This is the age of thermometers, lenses, prisms, and electric instruments. We may well adopt as a motto the Scriptural expression, "There is nothing covered that shall not be revealed, neither hid that shall not be known." Medical schools are now demanding not only a general knowledge of these important sciences, but a practical laboratorial skill in handling test-tubes, retorts, chemical apparatus, and physical instruments of research.

A learned member of the bar, while looking at a class in the chemical laboratory, remarked: "When I attended Yale College I used to see the *professor* work miracles; here I see the *students* work miracles."

While many decry our American methods of instructing medical classes, allow me to narrate an incident. In the fall of 1862 I was invited by the late distinguished physiologist, Charles Robin, to be present at the opening of l'École de Médecine in Paris. He said the Emperor deemed that the French medical course was less complete than that in the schools of Germany and Austria. He had permitted

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Paul Du Bois, the *secrétaire perpetuel*, to resign, and had appointed Rayer and himself to fill important chairs. But as he had not respected certain ancient customs in said appointments, Professor Robin feared the medical students would create a disturbance. I accepted the invitation and witnessed most disgraceful scenes. Several hundred medical students were arrested by the police for their attempt to prevent this much-needed reformation in medical instruction.

Professor Wurtz subsequently honored me with an invitation to be present, or, as the French term it, to "assist" at his opening chemical lecture. Prior to entering the amphitheatre, I asked where he instructed the medical classes in analytical chemistry. He replied that he had no laboratory for this purpose. I narrated to him the custom and conveniences in the American schools of medicine, where I had occupied the chair of chemistry. In the New York Medical College, opened in 1850, besides providing the apparatus for lecture illustrations, we arranged a students' chemical laboratory (the first established in a medical college in the United States), and gave them instruction in the analyses of poisons, urine, calculi, milk, etc. At the Long Island Hospital Medical College, founded in 1860, a students' laboratory was likewise provided for this practical work, as also at the New York Bellevue Hospital Medical College. Besides an oral or written examination in chemistry, all candidates for graduation had to exhibit their skill in the analyses of such substances as were of importance to the physician in his practice.

One of the late chancellors of a renowned German university remarked to a medical teacher, not long since, that the severest trial of his life was the examination of medical students in chemistry. Another German ex-chancellor, also a distinguished chemist, said to the same inquirer: "If the medical students could only remember so simple a fact as that Epsom salt is the sulphate of magnesia, it would afford me satisfaction"!

Since 1843 I have been connected with medical colleges as student, assistant in chemistry, and, later, as professor in this department, and I know that the faculties of medical colleges have always been attacked by certain of the profession for the incompleteness of the courses of instruction; and yet when said instructors have enlarged and increased the curriculum of study, they have keenly felt a lack of support from practitioners. For on

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their advice office students mainly depend in their selection of the college in which they shall study and hope for a successful graduation. Ten years ago one of the New York medical colleges endeavored to establish a three-years' graded course. The other colleges did not offer to coöperate. They dared not make the venture. Hence it was expected that the number of students would be diminished for several years, as many of them would avail themselves of the other medical colleges in New York City and Philadelphia where the shorter course existed. But the countenance, sympathy, and support of the profession were unwisely relied on to aid in this advance movement. After a fair trial, the Utopian scheme had to be abandoned, or the college would have been broken up. If at that time a State law had existed obliging all its medical schools to give a three-years' graded course of study, it would have but partially met the case; for in States not remote were venerable medical colleges in which only two years' attendance at the lectures and three years of study were required of the candidates for graduation. Here action by the National Government would have effectually accomplished the desired result.

The lengthened course is more serious to students in rural districts or from a distance than to city students. It involves the expense of a third year's residence away from their homes, and also the cost of travel. Otherwise it is greatly to the advantage of teachers and their pupils. It relieves both from over-exertion. Now, every hour and half-hour of the student's time is occupied from morn till midnight with lectures, clinics, dissections, quizzes, attendance at the hospitals, and special studies. On one occasion, at the close of the laboratorial drill, I suggested to the faithful workers to take a dozen test-tubes and chemicals to their rooms and familiarize themselves with the reactions. One of them exclaimed, "But we haven't time to eat!"—a remark that was echoed by such a chorus of laughter as indicated how fully the rest of the class agreed with the sentiment of the audacious spokesman.

In most of the European colleges the professors are paid by the governments. Many have residences provided for them, or an equivalent allowance; also apparatus, laboratories, and remunerated assistants. Professors' fees are higher there than in this country. They have also subsidiary emoluments. Dumas was

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made senator; so also Berthelot and Naquet, for which they received, under the Empire, 100,000 francs. After thirty years of service, if they have reached the age of threescore, the French government provides a pension. Professors Helmholtz and Du Bois Reymond divide a large and elegant structure, at least three hundred feet square, with domiciles for themselves and their assistants; two large lecture-rooms and extensive suites of private laboratories; also laboratories for students, and museums filled with costly apparatus. There are similar provisions for Von Hofmann, Ludwig, and all renowned German professors. The veteran teacher, Frederick Wöhler, when he built his laboratory at Göttingen, returned 30,000 thalers to the Hanoverian government, claiming that it was in excess of the requiremeuts.

As a rule, professors in nearly all our colleges have meagre remuneration for their faithful labors. Their widows and fatherless daughters are often left to support themselves by teaching or keeping boarding-houses ; while the widows of French and German professors are pensioned. The late Professor Arnold Guyot, after a few years' residence in Cambridge, Mass., said to me that "money given during the life-time or after the demise of the donor for educational purposes is generally appropriated for erecting edifices, instead of founding chairs. Unless there is a change our educators must be celibates."

I was presented with one of the large copper induction coils of the late Professor Joseph Henry, with which he discovered the *induced* galvanic current, while professor of physics in Princeton College, and which he paid for from his meagre salary.* Faraday followed Henry in the development of this grand electrical law, without a knowledge of which the alternating system of lighting by electricity and telegraphing from a moving train would be impossible, without entering into other extensive fields involving his discovery.

I have urged several of our liberal-hearted citizens to consider that the reputation of an educational institution depended on the attainments of its professors and their talents in imparting their knowledge, holding their classes, and instilling zeal in their pupils, rather than in ornamental structures ; that their money

* This is but one of the many instruments which taxed his bank account in his vitally important original researches.

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should be converted into developed *brains* rather than decorated *buildings*.

Some years since, after a dinner at Governor Tilden's, Professor Morse quoted the popular expression that "Americans worship the almighty dollar." He added: "This is not my belief; on the contrary, in no part of the world are private fortunes more lavishly appropriated for noble purposes than in this country. The man to whom I at one time paid laborer's wages for digging holes in the ground and planting telegraph-poles, has given half a million dollars to found Cornell University!" The names of many other large-hearted Americans were mentioned who had made princely donations for educational purposes. Of late there has been a *crescendo* movement in this direction: even millions are freely given. Through the liberality of Mr. Andrew Carnegie, not only was a pathological laboratory, which bears his name, erected for the Bellevue Hospital Medical College, but at the close of each session he has generously sent his check to cover its expenses.

The expensive apparatus for illustrating lectures in chemistry, physics, physiology, etc., in medical colleges is, as a rule, the property of the individual professors in these branches. The instruments have to be repaired, and constant additions must be made thereto, to keep pace with the advance in these sciences. The professors of practice of medicine, surgery, and obstetrics must command positions in hospitals. For these they rarely receive any salaries. They must also devote much unremunerated time to the sick poor. The late eminent surgeon and physician, Dr. James R. Wood, in the course of his long and useful career in this city, had on his books the names of over one hundred and ten thousand patients that he had treated gratuitously in his office. He also served for more than thirty years as one of the surgeons in the Bellevue Hospital, without a dollar's compensation. How many clergymen or lawyers can exhibit such a record of unrequited labor?

We need more Carnegies and Vanderbilts to enrich our *medical* colleges, endow our professorships, enlarge our laboratories, enhance our facilities for original research, and enliven zeal among our gifted students. Rather than severe criticism, the instructors in our reputable medical colleges deserve commendation from their professional brethren and the general public for

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their arduous, self-sacrificing, and ill-requited labors. They will hail with delight any legislation tending to elevate their noble calling.

Many advocate the elimination of professors from examining boards. This will not raise the standard of medical instruction. How many eminent medical practitioners who are not teachers could thoroughly examine graduates of colleges in anatomy, materia medica, physiology, chemistry, physics, pathology, and bacteriology? Professed instructors in these latter themes have to devote much of their time to keeping pace with these rapidly-advancing sciences as applied to medicine. No active practitioner can do it. The educated students would know more than their examiners. How many of the celebrated physicians and surgeons, unless recently graduated, have handled the spectroscope or the polariscope? How many of them can make *quantitative* analyses of the urine, or determine the amounts of free ammonia, albuminoid ammonia, the chlorides, nitrates, and nitrites in water, to decide upon its potable character? Yet the medical student of to-day has to familiarize himself with these themes. He is a much harder worker than his predecessors were.

As an illustration of the composition of an examining board, in 1871 the Legislature of this State passed a law authorizing the Mayor of New York to appoint a commission of four examiners of druggists and prescription clerks in this city. Two of the appointees were skilled druggists; one of them was vice-president of the New York College of Pharmacy. The examiner in Latin and the writing of prescriptions was a physician and professor of Latin in the Manhattan College (where his students had to be taught to speak in this language, to prepare them for the priesthood). The president of the commission, who examined in chemistry, had ten years' experience as professor in the College of Pharmacy. We examined over nine hundred druggists and prescription clerks the first year. At the instigation of the wholesale druggists the law was revoked. When medical men and the public needed protection against the importation of adulterated drugs, the National Government had to be appealed to. A law was passed appointing drug-examiners at every port of entry.

If we are to demand of all matriculants in medical schools diplomas from reputable classical and scientific colleges, or, in lieu

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thereof, to pass a preliminary examination (as is now required through a recent act of the New York Legislature), and also that they attend graded medical courses of three years prior to becoming candidates for graduation, an act of the Federal Government could accomplish it. By the same authority boards of medical examiners could be appointed in the various States. But as each State claims the right to authorize the establishment of its universities and colleges, ought not the States to appoint their own examining boards? True, these boards would differ in rigidness. But this would also apply to examiners authorized at Washington.

All our best medical colleges adopt their own modes of examination. Some examinations are conducted privately by each professor, while others are public. At the New York Medical College the students were examined in the presence of the whole faculty and a board of censors, consisting of three eminent practitioners appointed by the board of trustees. At one period we invited the censors appointed by the State Medical Society, which the other New York Medical Colleges did not do. This was a severe ordeal for the candidates. But few of them could respond as successfully as if the examination had been less public.

Our National Government does not interfere in the education of those preparing for the bar or the pulpit. These professions are equally important for the "general welfare of the people" with that of medicine.

The "quack," the "shyster," and the "sheep in wolf's clothing" will always exist. Some men of business, railroad and mining officials, will exhibit the frailties of humanity. Fraudulent bills and coins will ever be found in circulation.

Both professional and non-professional men have seen great progress in all branches of education, and the medical portion has not proved an exception. We may predict that in a few years each State will have its board of medical examiners, and a unification of the entire system of such boards will probably follow without action of the Federal Government.

R. Ogden Doremus.

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NOTES AND COMMENTS.

I.

EUROPE IN PERSIAN EYES.

AMERICANS are often amazed at what appears to be almost a deliberate intention on the part of intelligent Europeans to miss of a correct apprehension of the conditions of life in the United States. But on reflection we shall see that this proceeds from the natural difficulty most minds encounter in appreciating what is novel and outside of their experience, and hence jumping to the conclusion that because novel it must be objectionable. In most cases prejudice, rather than a disposition to decide unjustly, is the real cause of such ill-founded assumptions.

If such be the difficulty as between two regions having so much really in common as Western Europe and the United States, how infinitely more arduous must be the problem when Europe and Asia undertake to comprehend each other, and mete out full justice each to each. The numerous works of travel on the East, and the many estimates of Oriental character formed in different ages by Europeans, indicate, perhaps, in several instances keen observation of external facts and vivid pictures of the surface of Oriental life. But very, very few of them show ability on the part of the writer to abandon his own native prepossessions, and to judge of the qualities of the Asiatic mind with fairness or with any clear perception of its essential traits, or of the causes that moulded it and continue to keep its original cast unchanged, while the rest of the world moves on to higher planes of at least material progress.

The recent visit of Nasr-ed-Deen Shah to Europe suggests the natural inquiry as to whether an intelligent Asiatic, after surveying the pomp and splendor of the capitals of Europe and the so-called triumphs of modern science and of Western civilization, would confess to a sense of the inferiority of his own people and country, or, like the European judging of Asiatics, continue to regard Europeans as inferior beings. From what I have seen of Orientals of all ranks and degrees of intelligence, it seems to me altogether improbable that the contrast between European and Asiatic civilization would produce on the mind of an Oriental any impression arousing lasting respect and admiration or working any immediate and decided change in his character. Notwithstanding the wonder caused by the sight of the astonishing inventions of Europe or his occasional inclination to introduce some of them into his own country, the belief of the Asiatic in the superior genius and nobler character of his own people and their institutions will remain unshaken. The pageants of Europe will be to him merely as the amusement one takes in the tricks of a mountebank, which entertain the eye without in any sense affecting the serious side of the beholder's mind. He will return to his own country altogether satisfied that he is not like these misbegotten sons of unbelievers who eat the flesh of the unclean animal and expose the faces of their women in public.

While some such language might very likely be used by an Oriental when expressing his private opinion on this subject, it would be taking a very superficial view of the causes underlying such an opinion to assume that it proceeds from the national vanity of a shallow nature, or from a stolidity that is blind to the march of progress. The reason lies far deeper, and because Europeans have failed to perceive it they have almost uniformly failed to do justice to life and character in the East.

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The differences existing between Frenchman and American, Englishman and Spaniard, are trifling compared with the deep gulf that lies between the Asiatic and the European character. We know nothing to which to compare it except the division of the human race into two great nations—one of men, the other of women. The temperamental differences between these sex nations, common to each the world over, are far more pronounced and ineradicable than the race divergence of German from Italian, Hindoo from Persian. In like manner we may classify the greater part of the human race under two vast divisions—the Asiatic and the European. No one Asiatic differs from another to any such degree as both differ from all Europeans.

The Asiatic mind looks at existence from a point of view entirely distinct from that of the European. Its grasp of facts, its method of ogic or reasoning, is altogether and radically different. It has essentially a feminine cast,—a statement made in no invidious sense, for woman is not inferior to man, but only different. With great astuteness in certain directions the Asiatic combines a simplicity in other lines of thought akin to the innocence of childhood, both of these qualities prevailing even in the most brilliant Oriental to a degree impossible in a European of equal intelligence. Hence a European is liable to assume, when he encounters this phenomenal Asiatic simplicity, that he is talking with individuals of exceptional ignorance or crassness, when the reverse is more likely to be the case. The Asiatic mind concerns itself but little with facts, and hence is but moderately interested in scientific discovery, and prefers hyperbole and poetic forms of statement to a precise narrative of events. The Shah-Namêh of Firdoüsee is sufficient for the historic needs of most Persians. What inventions may be credited to the Orient have been wrung from it by stern necessity rather than by a yearning for discovery and progress, or a greed for gain.

The Oriental also prefers finesse or diplomacy to direct action; artifice in order to gain his ends, rather than a bold grappling with the actual. While not lacking in courage and capable of enormous exertion at intervals, the essential characteristic of the Asiatic mind is a love for repose; his imaginative and reflective powers, although sometimes kindled with the fervor of passion or ambition, incline rather to quiet meditation and devious wanderings among the mazes of mystical speculation. This is characteristic of all classes.

These habits of mind, together with the customs and laws of Asia, are the result of climatic and topographical conditions; as such they have existed from the earliest period, and have, therefore, the prime element of fitness to recommend them. Hence the Asiatic sees that they are in the main beneficial; nothing in his environment suggests the necessity for a radical change, while the narrowness of view common to all men, the failure to perceive the relations of things, makes it difficult for him to apprehend why what is good in his own country should not be equally fit in Europe. Another point to consider in this connection is the fact that the Asiatic is naturally averse to Europeans, and therefore despises their vaunted customs and progress. If, like the Turks, he occasionally borrows some European inventions, it is chiefly because he desires the means to cope with Christendom in the event of war, while in his secret heart he curses the necessity that forces him to take ideas from the Christian. Of course, there may be exceptions, as in the case of the Japanese or of remarkable individuals elsewhere, but this is the candid opinion of most Asiatics. In other words, they prefer to travel the journey of life according to the conditions which originally shaped the Oriental mind. As the youth whose natural bent being for the army is forced into the church looks askance at his untoward destiny, so Asiatics owe Europe a grudge whenever swayed by her influence they turn aside from the path they are naturally fitted to follow.

The lofty, not to say arrogant, tone and condescending manner of Europeans when dealing with Orientals even in diplomatic transactions has further increased the dislike of Asiatics and disqualified them from approving the civilization of Europe. The Asiatic is proud, and if ever pride were justifiable, the privilege may well be claimed by him. What European people can boast a tithe of the antiquity of China or Persia? The Persian, for example, may not know as much of exact science as the European, but the glowing strophes of her poets magnifying the exploits

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of her heroes have been sung to him since infancy, and he knows well that from the mysterious plateaus of Irân Europe drew her first lessons in art, philosophy, and even science; that the genius of Alexander was developed fighting with Persians; and that the legions and emperors of Rome, searching the wide world for fresh conquests, were baffled only in one quarter, were over and over again hurled back shattered and dismayed by the ancestors of those very men who still wield intellectual and civic power in that ancient land. The Persian never for a moment forgets these facts. The nations of Europe are but as noisy children to him whose hoary empire, enveloped in the sublime solitude of age as with a mantle, sits majestic among the slowly-moving eras, and beholds from its height the endless procession of princedoms and kingdoms and empires filing past to a common oblivion.

Another feature that intensifies the Oriental's self-content is derived from his religion. The great cults, the correlated religious forces of Asia, have not only added much to literature that is sublime and beautiful, but their theology is often elevating as well, and is quite sufficient to tax the reflective powers of the deepest thinker. The puerilities laid to their charge are of scarcely more moment than certain passages in the Christian Scriptures, which are not deemed to affect the essential truths of the Bible. As regards morals, Asiatics may justly claim that the example set them by the majority of the Christians they encounter, the bad faith, cruelty, rapacity, greed, and licentiousness of those who vaunt themselves as better than Orientals, are not such as to arouse a burning enthusiasm in the bosom of the shrewd and observant Asiatic; nor is he slow to diagnose the pharisaism that thinly disguises the ambitious encroachments of European governments upon his territory.

The religions of Brahm, of Buddh, of Mohamet, are qualified to produce content, and the element of fatalism, so prominent a feature of Islamism, deepens this pervading content; content in turn is qualified to lead to self-satisfaction, and hence the Asiatic, profoundly satisfied with himself and his environment, considers himself infinitely superior to all others. The curiosity and surprise that the magnificent spectacles of Europe might arouse do not, therefore, produce more than a passing impression. After a feverish round of sight-seeing and dissipation in Christian lands, he returns to his country perfectly satisfied with its quietistic thought, its life of repose. From thence he looks back to the activity of Europe without a sigh. The perpetual restlessness of the West, its everlasting struggle with the problems that seem to make for progress, appear to him like the endless effort of Sisyphus, ever rolling the rock of progress to the top of the hill but to have it roll to the foot again, and when one reform is accomplished to begin another in the unending round of exertion.

Such are some of the reasons why an Oriental may, in his turn, fail to appreciate the good in European civilization, as the European fails to understand that of Asia. Candor suggests that each has good reasons for the faith that is in him. Both furnish complementary phases of character and civilization, and while each may be susceptible of modification and improvement, it would be a misfortune to the world if either were entirely abolished.

S. G. W. BENJAMIN.

II.

THE MONEY VALUE OF A HUMAN LIFE.

THAT which we call a human life has always been recognized as having to its possessor, and perhaps to others by reason of affection, a paramount and immeasurable value. That it may have also a money value has been acknowledged in various ways, notably in the institution of slavery. From early times the ownership of the services of a human being has had a worth in accordance with the excess of earnings obtainable above the necessary cost of subsistence. This value has not usually been computed with accuracy in each individual case, but in a general way a price has been fixed for a slave, taking into consideration his age, physical condition, and capacity for the kind of service desired of him.

It is clear, however, that certain important elements are either wholly lacking

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or but partially developed, in the case of the life of a person held in bondage, which may be present if the possessor of the life is free and independent. Self-interest, ambition, and family ties are needed to develop the highest value of a human life, and it is my purpose to show that such a life has qualities which may impart to it a worth as real and as ascertainable as that of other property.

In the markets of the world, that which is commonly known as property depends for its value upon what can be obtained from it over and above the cost entailed by its possession. Sometimes this surplus is sure and constant; sometimes it is uncertain and fluctuating, and sometimes it is wholly prospective. In fixing the price, all these qualities will be considered, and the result will rest upon a combination of probabilities. The purchaser of a business block, for example, will calculate the rentals on the one hand and the taxes, repairs, and necessary expenditures on the other. The remainder will show upon what sum as a principal this will offer a fair return as compared with other investments. But this is not all, nor, indeed, is it the most important consideration. If the building is composed of, or surrounded by, inflammable materials, so that the hazard of its destruction by fire is great, its value will be seriously and unfavorably affected. It is true that institutions have been organized to distribute such losses, but as the property-owner must pay for protection his full share of the risk, which will be accurately and intelligently estimated, the value which his building would have, were it not for this hazard, will be diminished by just the chance of that contingency. The present condition of the structure, viewed in the light of natural decay and its adaptability to the needs of the location and times, will demand intelligent discrimination.

The amount, therefore, which an investor will pay for the block will be determined by his knowledge of what it now produces and his estimate both of what it will yield in the future and the time when, either by gradual deterioration or by sudden accident, it will become unable to afford an income. If there can be obtained from it more than will suffice to meet necessary expenditures, then the property has an actual value which will vary according to the estimate that may be made of its future. That neighborhood which to-day attracts business by the elegance of its buildings or its nearness to lines of travel or transportation may to-morrow be swept by fire or damaged by changes in modes of conveyance. No human foresight can provide with certainty for these contingencies, but the general future of a section is estimated by the careful student of the laws underlying commercial transactions, with an accuracy which, on the whole, enables him to reap the profits that legitimately belong to high intelligence. In the change of ownership the purchaser thinks that he is receiving more than an equivalent for his money; else he would not buy. The seller differs as to the probable future, and believes that what he now receives will be of greater value; otherwise he would retain his possession. The result, in almost any particular transaction, will show that one or the other has materially erred in his estimate, but, as a whole, real estate, or any other property which is valued for its income, will be found to conform to the general law which governs the value of money.

Can human lives possess attributes which will give to them real values? It would not be difficult to enumerate many lives which cannot be considered of any pecuniary worth because, for various reasons, they produce nothing. Such are those of the very old, the imbeciles, and the confirmed invalids. But my purpose is to show that a life surrounded by fairly supposable circumstances, such as exist in every community, has a definite value.

Every man who earns or produces more than suffices for his actual personal expenses is of pecuniary value to some one besides himself. It may be that a family is dependent upon him for support, or he may accumulate his surplus income for the benefit of heirs or charity. No matter what the purpose is, there is a value to some one in his services. Suppose he has earned $2,000 during the year, and his food, clothing, shelter, and other strictly personal expenditures have amounted to $500. Then clearly he has been of the value of $1,500 to some one during that time. We can measure the value of the years which have passed. Can we estimate with accuracy those which are to com[illegible]?

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Careful observations, extending over many years, in widely-separated countries and among various nations, have demonstrated that the mortality of the human family is governed by a law which is constant in its operation. That inevitable power, death, working through its numberless agencies, by disease, accident, and violence, and seeming to seek its victims by chance, is ruled by an intelligence which preserves the balance of population, directs the laws of supply and demand, and renders possible the various calculations upon which the commerce of the world is based.

The most extensive compilations of statistics, and the most precise calculations which have been made in search of the law of mortality, are those derived from investigations among what are known as selected lives, or those which are unimpaired by hereditary taint, and are found by the examination of physicians to be practically free from disease. A mortality table was constructed in 1843 from careful observations among a large number of such lives whose course could be accurately traced, and numerous more recent investigations have served to confirm the substantial correctness of the death-rate which was then shown to exist.

Let us suppose that the man whose surplus earnings are $1,500 a year is thirty years of age and in good health, and that money is worth 4 per cent. per annum. By the mortality table, to which allusion has been made, the present value of the future surplus earnings of this life is $25,560.

It is true that this value is based on averages, and that the assumption that he will, through his life, receive and spend just the amounts here set down will not probably be realized. It is well-nigh certain that his death will occur either before or after the date here fixed. Disease or accident may rob him permanently of his productive power. Circumstances which no skill guided by research can calculate, and no judgment foretell, may change the current of his life, and enhance or diminish the value of his efforts. And yet this value rests upon a foundation composed of elements no more uncertain than those which determine the worth of the business block. Both the building and the life are constantly exposed to the danger of destruction, but that chance can be measured even more accurately in the latter case than in the former.

The natural ability of one man is greater than that of another, and this advantage will be shown in the value of their respective services. These qualities, as well as those of industry and perseverance, are inborn traits, and will, considered in connection with education and training, determine the amount for which the possessor can lease his efforts to others or employ them for independent profit. What nature has done for the man corresponds with the location of the building. What experience has taught him is like the quality of the structure. In each case there are certain necessary expenditures which must be met before any real value can exist, and in each case the worth rests upon estimates.

JOHN M. HOLCOMBE.

III.

NAVAL EDUCATION IN THE FUTURE.

THE advent of new cruisers and battle-ships to the navy of the United States has given rise to an imperative demand for change in the old system of drill and training so long in vogue in the service. That such a change has become necessary is now evident to the officials of the Navy Department, and is apparent in the recent order of the Secretary of the Navy convening a board of prominent officers, instructed to examine carefully and report for adoption a method of training and drill compatible with the times. The work which this board has in hand is an all-important one. In effecting the end desired, obstacles in every imaginable form will be encountered, not the least of which will be the opposition arising from the older officers, who are opposed to all innovation. It is not an easy matter to impress upon the adherents of the old school the fact that the days of "yard-arm" fighting, when hand-grenades, cutlasses, and pikes were powerful adjuncts in deciding engagements, when for hours ships manœuvred for position before "closing in," are irretrievably of the

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past, and that methods of fighting in keeping with the scientific developments of the day will characterize future combats on the sea.

One is fairly well able to calculate beforehand the result of a naval engagement of to-day, provided there are at hand official data of the battery and armor strength, speed, and manœuvring powers of the opposing vessels. In such calculations the personal equation is not considered when great discrepancy exists in the comparative efficiency of the opposing vessels; but let there be a near approach to similitude, and the engagement can, with safety, be adjudged as resultant in favor of the better disciplined and trained crews, to the forces combining bravery and daring with the employment of modern fighting tactics. History furnishes many instances of numerically-inferior forces gaining victories by reason of their high state of discipline and training; and though naval forces of to-day depend greatly on vessel types to give them victory, there is, nevertheless, a demand for discipline and training of an even higher state than has been known in the past.

But it must not be forgotten that there is a vast difference between discipline and training. A crew may be thoroughly disciplined, and yet be ignorant of the most important duties a thorough knowledge of which can alone insure success. On the other hand, a trained crew, efficient in every sense of the word, may be sadly lacking in discipline. It not uncommonly happens that the crews noted for their smartness, and especially so when brought into competition with others, are the most unruly. The same is true of the land service. The battalion that passes the reviewing-stand without a break, that executes manœuvre after manœuvre with perfection in every detail, is not always the command that shows the least number of names on its misdemeanor report. The Germans are fully cognizant of this fact, and Prince Kraft has taken occasion in his artillery report to remark that he has often found the poorest-showing batteries and battalions on review to be better disciplined and more orderly commands than others far superior to them in training.

Within the past decade tremendous strides have been made by the navies of Great Britain and France towards obtaining a higher state of efficiency. In the case of the French service, the progress has, perhaps, been the most marked. France has attempted to do more than make sailors of her men. She has endeavored to make them soldiers as well, and, as evidence of what her naval forces are capable of accomplishing ashore, she proudly points to the showing made by the men from the Brest fleet when stationed in the trenches before Paris. To these sailor battalions was universally accorded the honor of having in their ranks the best fighting men about Paris. What France has accomplished with her naval forces appears to be the aim of efforts recently instituted by the naval powers. The fact of an admiral having in his squadron a force of 2,000 or 3,000 men capable of being rapidly thrown on shore and operated as a body of so many trained soldiers, is recognized as a most salient feature, and one tending to increase materially the strength of any power depending on its naval establishment for the maintenance of its foreign interests. Notwithstanding the high state of efficiency in which the British service is supposed to be, there is just now a most decided clamoring for courses of instruction more modern, more adaptable to the times.

In the United States naval service there has been absolutely nothing done—not even since the establishment of a new navy was decided upon—towards increasing the efficiency of the personnel. The drills, the training, and the routine now in force aboard our war-ships are much what they were twenty, and even thirty, years ago. The dogmatical tenacity with which members of the old school have insisted on meting out instruction and duty incident to the days of their boyhood has created that form of indifference always the result of enforcing upon the intelligent and thinking mind work long known to be not only useless and out of place, but a waste of time. The young apprentices are now being trained without regard to the new navy. The instruction which they are receiving aptly fits them for service on board a type of vessel peculiar to the "fifties." It is not to be disputed that a certain amount of sail and spar drill is good instruction for a young seaman. Let him be one of a prize crew detailed to take a merchant ship into port, and his knowledge

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will be of service to him; but as to years being spent in exercises long relegated to the past, when even the most assiduous application will enable one to keep pace with modern developments, such a policy as has been pursued in the past is little short of suicidal. The British Admiralty is at least determined that the younger officers shall not waste their opportunities, and has directed, in a recent order, that in future "midshipmen shall be ordered only to 'mastless ships.'" This is to enable the time that might have been taken up by spar and sail drill to be devoted to studies important to the duties of modern naval officers.

There appears to have developed of late considerable duty for naval forces ashore. This is seen in the recent operations of British naval battalions in Egypt, of French naval forces in Tonquin, of the Germans on the east coast of Africa and in the Pacific, of the Portuguese forces on the west coast of Africa, of the Italians in the north, and of our own forces on the Isthmus of Panama and out in the Pacific. The duty of a man-of-war's man of to-day is essentially that of a soldier; the clouds of canvas which were once his delight have disappeared, even the masts themselves, and there is now left but the grim row of guns, the armory floor-like deck, and the piles of rifles, cutlasses, and revolvers. But there lacks yet the proper infusing of the military spirit. The aversion in bygone years to all pertaining to a soldier's still apparent among the older officers, as a part of the teachings of the old school. As a result, young officers are seen even now hurriedly going through a company drill, caring little, except that it enables an account to be put in the reports that such drill has been performed. One seldom sees attention paid to detail, except so far as to insure a fairly good showing when the ship is called upon to send an infantry company to "parade."

As to small-arm firing and target practice, the men know little or nothing. The navy regulations specify that so many rounds (twenty) shall be fired in a year, but the number allowed is far too small to produce any good from the practice. But little encouragement is offered to men for extra exertions, and there are no prizes, as in the British and French service, for special skill. The crews of the American war-ships are, as a rule, disciplined crews, but as crews trained in all pertaining to modern warfare they are sadly deficient.

It will become imperative, now that ships without masts are to come into service, that an expedient be devised for the exercise lost in "activity aloft." The long, broad decks of the new ships, especially those of the "Chicago," "Baltimore," "Newark," "Maine," and "Texas" type, offer every facility for the erection of gymnastic apparatus. Officers and men can alike do regular duty in this line, which will serve greatly to shake off the apathy that seizes hold of a crew little drilled. There cannot be too much attention paid to the development of the individual sailor, both to obtain a trained factor and a physically perfect one. There has been, no doubt, much odium cast on the crews of the American war-ships because of the great numbers of foreigners allowed to enlist, all of which has served to lessen the interest that officers should take in the men. It is well known that this foreign element must be got rid of before the navy will become a popular service, and there is no surer way of accomplishing both ends than by making the naval establishment a thoroughly military one. The sooner the service awakes to a realizing sense that the navy of to-day is a modern institution, a fighting factor devoid of all the romance of the past, the sooner the country will be prepared to resist all inroads from hostile sources.

G. L. CARDEN.

IV.

WILL OUR COAL SUPPLY EVER BE EXHAUSTED?

TIME was when the carbon and hydrogen which form practically the whole of our supply of fuel and the principal part of our food were inorganic—no more capable of sustaining combustion or animal life (if we except certain microcopic forms which decompose carbonic acid) than granite or slate. For vegetable life, however, the supply of food was at its maximum. Vegetable life came, generated in some unknown way by the solar energy which poured through the atmosphere and the heat energy which penetrated the earth's crust from within. Through the unimaginable ages

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of the Carboniferous period a gigantic flora fed on the rich atmosphere, assimilating its carbon and hydrogen, and thereby setting free its oxygen, until it could sustain its animal life, at first in the lowest, then successively in the higher, forms.

This gigantic flora, with its enormous potential energy of chemical separation from oxygen,—an energy derived chiefly from the solar energy of that period, easily admitted and tenaciously retained by the atmosphere,—is now stored up in the earth as fuel for the future generations of our race. Future, I say, for tremendous as the annual consumption of coal, petroleum, and natural gas for a generation has been, we have as yet only begun upon the great store. Hitherto Mother Earth has been able to supply her children's needs by expending only her current income. In this latter day, however, their demands have multiplied so rapidly that she has been obliged to draw upon the capital stored up during the long ages of her maidenhood. How long will that capital last at the terrible rate at which we have begun to squander it? Is her children's prodigality actually making her poorer? or has she the power to nullify the effects of their extravagance? and are her diminishing resources due only to the decreasing energy of her natural supporter and protector, the sun?

However prodigal man may be in his use of earth's treasures, he can never annihilate one atom of her substance or transport it beyond her domain. In his "wasteful" consumption of fuel, he is only restoring its elements to their primeval condition as constituents chiefly of the aërial and aqueous oceans which surround our globe. It follows, then, that the more rapid the combustion, the richer becomes the atmosphere in its power to sustain and force vegetable growth. If it were possible for that period, so often predicted, to arrive, when the 6,000,000,000,000 tons, more or less, of fossil fuels now stored up in the earth's coal-bins, shall have been consumed, the atmosphere will simply have returned to its primeval condition, that which preceded the Carboniferous period. The only essential difference, therefore, which will mark the two remote geologic periods, the past and the future, will be due to whatever reduction will have taken place in the sun's energy. But whether that condition is destined ever to return to earth or not, one thing is certain: *it will not be through human instrumentality.* Ages before its arrival the percentage of carbonic acid in the atmosphere will have passed the point possible to the continuance of human life.

If not through human agency, then how is it to come? Certainly not by any of the processes now in operation. The percentage of carbonic acid in the atmosphere does not materially vary. This fact means simply that somewhere on the earth's surface vegetation is taking up the enormous surplus of carbonic acid constantly pouring forth from our millions of furnaces, and thus restoring it to the form of available fuel. The weight that is constantly sinking is thus being constantly relifted by the daily conversion of solar to vital energy.

Only some stupendous convulsion of nature, like those dreamed of by John of Patmos and Lord Byron, in which "the elements shall melt with fervent heat," can undo the work of the Carboniferous ages,—some tremendous upheaval in which the subterranean stores of fuel shall at once be laid bare and given over to the devouring oxygen. Then would a new cycle begin, another carboniferous era, in which the store-houses would be again slowly filled for future generations of men. Again and again might the cycle return, until the diminishing energy of the sun should fail to uplift the fallen weight, to reorganize the inorganic.

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